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The Early Atlantic Salmon Fishery in Newfoundland and Labrador

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Abstract

TAYLOR, V. R. 1985. The early Atlantic salmon fishery in Newfoundland and Labrador. Can. Spec. Publ. Fish. Aquat. Sci. 76: 71 p.

Prior to John Cabot's arrival in 1497 and for about two centuries afterwards, Atlantic salmon of Newfoundland and Labrador were a source of food for indigenous peoples, as they may also have been for visiting Vikings of the tenth and eleventh centuries. Earliest utilization by Europeans other than Vikings began in the early sixteenth century by crews of migratory fishing ships engaged in the fishery for cod. Salmon fishing as a commercial venture in the study area began in the Bonavista Bay region of insular Newfoundland around the year 1700.

This report examines the salmon fishery of insular Newfoundland and of Labrador from earliest times to the beginning of "modern" statistical records in 1910. It also records the fishing history of many individual rivers and groups of rivers, including reference to regulation or the lack of it and to fishing methods. Anecdotal material is occasionally included. Numerical data used in this study are mainly from Colonial Office records of the eighteenth and nineteenth centuries, and from Export Returns following the establishment of Representative Government in Newfoundland in the mid-1830's. The record for both areas, but especially for Labrador, is of varying reliability in terms of completeness and accuracy. The study relates major variations in the numerical record to social and economic upheavals of the times and to major trends in apparent abundance of salmon. It is concluded that major changes in the latter are, for the most part, due more to natural causes than to man's activities.

Résumé

TAYLOR, V. R. 1985. The early Atlantic salmon fishery in Newfoundland and Labrador. Can. Spec. Publ. Fish. Aquat. Sci. 76: 71 p.

Avant l'arrivée de Jean Cabot, en 1497, et plus ou moins durant les deux siècles qui ont suivi, le saumon de l'Atlantique de Terre-Neuve et du Labrador a été une source de nourriture pour les indigènes, comme cela avait peut-être été le cas pour les marins vikings du X^{e} et du XI^{e} siècles. Cette ressource a été pour la première fois utilisée par des Européens autres que des Vikings au début du XVI^{e} siècle, soit par les équipages des bateaux qui suivaient les bancs de morue. La pêche commerciale du saumon dans la zone expérimentale a commencé dans la région de la baie Bonavista de l'île de Terre-Neuve, vers 1700.

Le présent rapport porte sur la pêche du saumon à Terre-Neuve et au Labrador depuis ses débuts jusqu'à l'enregistrement des premières données statistiques «modernes», en 1910. Il présente aussi l'historique de la pêche dans nombre de rivières individuelles et de groupes de rivières, y compris des notes sur l'existence ou l'absence de règlements de pêche et sur les méthodes de capture. Des anecdotes sont parfois racontées. Les données numériques proviennent surtout des dossiers du XVIII^{e} et du XIX^{e} siècles du ministère des Colonies et des Rentrées d'exportation après la création d'un gouvernement représentatif à Terre-Neuve, vers le milieu des années 1830. Les données disponibles sur les deux régions sont variables en termes de précision et d'intégralité, surtout pour ce qui est du Labrador. L'étude relie les grandes variations des données numériques, d'une part, aux bouleversements socio-économiques de l'époque et, d'autre part, aux principales tendances dans l'abondance apparente du saumon. L'auteur conclut que les importantes variations de cette dernière sont davantage dues à des causes naturelles qu'aux activités humaines.

Introduction

Atlantic salmon stocks of some Newfoundland rivers have been subject to a commercial fishery by settlers since about the year 1700, though some exploitation, a by-product of the migrant ship fishery for cod, probably began with Newfoundland's re-discovery by Europeans in 1497. Notwithstanding, Newfoundland salmon streams still support extensive populations of this valuable fish, a comparatively favourable situation attributable to their having largely escaped the intensive development that has invariably diminished, and frequently destroyed, formerly abundant salmon runs elsewhere. However, local salmon stocks have not escaped unscathed, but have otherwise been subjected to most depredations of nineteenth and twentieth century man in North America.

Because there are many gaps in the numerical record, its interpretation is frequently difficult and must sometimes be subjective or even speculative. Occasionally, related anecdotal material is included. Nevertheless, it has been possible to chronologically and geographically reconstruct the fishery from its earliest mention in the Greenlander's Saga, through the beginning and development of both the European and domestic commercial fisheries, to an end point in 1909, after which time "modern" statistics began to be recorded.

Two major conclusions emerge from this study. The first is that Newfoundland and Labrador salmon stocks have survived almost three centuries of fishing exploitation, having undergone large variations in apparent abundance during that time due mainly to natural causes. The second is that given good management, including protection from major threats such as pollution, dams and diversions, the species can continue to survive in significant numbers in its natural habitat for the foreseeable future. It is hoped that this study will contribute to this desirable end.

CHAPTER 1

Norsemen and Beothucks

There was no lack of salmon in the river or in the lake,
and they were bigger than any they had ever seen before.
THE GREENLANDERS SAGA, *ca.* 1400

The first Europeans to benefit by the presence of Atlantic salmon in Newfoundland were probably Norsemen from Greenland, the above being the earliest known reference to salmon in local waters. It is quoted by Norwegian archeologist Helge Ingstad in his 1969 book, *Westward to Vinland*, which tells the story of the discovery of probable Norse sites at Black Duck Brook, near the village of L'Anse aux Meadows, on the northern tip of the Island of Newfoundland.[1] This brook, which may or may not be the "river" referrred to in the sagas, carries a small run of salmon to the present day. If Ingstad's interpretation is correct, it is possible that for some decades following Leif Erikson's Newfoundland landfall around 1000 A.D. there was some European utilization of this excellent locally available food fish.

There were populations of Indians and Eskimos on the island prior to the arrival of the Norsemen and the sagas record that they several times encountered "Skraelings", their name for the aborigines that they met with in the new world.[2] Ingstad says that these were probably both Indian and Eskimo, including the Beothuck tribe which was still on the island of Newfoundland when John Cabot arrived in 1497.

Little has been recorded about the role of Atlantic salmon in the life of the Beothucks and even less about its place in the lives of their predecessors, though it is safe to assume that all utilized it in season. Indeed, considering that the Beothucks survived on the Island of Newfoundland during its first 300 years of exploration and settlement by Europeans, there is a surprising lack of information in this regard. That which is known is largely found in J. P. Howley's book *The Beothucks or Red Indians: the aboriginal inhabitants of Newfoundland*, published in 1915. It includes the fact that the Beothucks knew the Atlantic salmon by the name of *Wasemook*.

Early literature about the first three and a half centuries of European exploration and settlement in Newfoundland has many references to native Indians but says little about their use of the salmon resource. One of the first to provide something specific was Richard Edens, whose book *Gatherings from writers on the New World* was published in London in 1555. In it, speaking of the natives (apparently Beothucks) met with on John Cabot's 1497 voyage of discovery, he says:

"They eat fysshe more than any other living thynge, and especially salmons, although they have fowles and fruit. They make their houses of timber . . . and cover them with skynnes of fishes and beastes."[3]

The next certain reference appears in 1768, by which time Beothuck numbers had been much reduced by European settlers who were gradually dispossessing them from the coastal areas to which they resorted to exploit salmon and other near-shore marine resources. Because of their dwindling numbers and the many "incidents" between them and the settlers, frequently fatal to the aborigines, Governor Sir Hugh Palliser authorized an expedition to the Exploits River area in that year to attempt to initiate friendly communications.

The expedition, under the command of Lieutenant John Cartwright, was in the Exploits area from August 24 to September 5, 1768, but failed in its objective of communicating with the Beothucks. However, Cartwright's report does tell something about Beothuck utilization of Atlantic salmon when he describes what appeared to be an arrangement for drying salmon at some wigwams just below what is now Grand Falls:

"Adjoining these large wigwams, we saw in one place, a slight frame made of sticks pricked into the ground and crossed with others, to which were hanging various shreds of split roots, small thongs and fine sinews all of which gave it the appearance of a machine for drying salmon upon."[4]

A more detailed account of the expedition is contained in a book on Cartwright's life published by his niece (F.D. Cartwright) in 1826, which says of the Beothucks that:

"In summer they lived altogether, as is supposed, on the seacoast . . . Besides hunting . . . they used formerly to kill considerable quantities of salmon in the rivers and small streams; but the English have now only left them in possession of Charles's and another brook."[5]

It thus appears that by 1768 the decline in Beothuck numbers was already well underway, and such impact as they may have formerly had on salmon stocks was much diminished.

A sidelight to the 1768 Exploits expedition is that John Cartwright was the first European to see Red Indian Lake, the second largest body of fresh water on the Island of Newfoundland. He called it Lieutenant's Lake.[6] Of more significance to this study, his brother George, who was with him for part of his journey, is the same George Cartwright who began trading posts on the Labrador coast in 1770, and after whom the Labrador community of Cartwright is named. The story of his 16 years on the Labrador coast is well documented in his journals.[7]

As noted, John Cartwright's 1768 report said that only two salmon rivers on the island still remained to the Beothucks at that time, these being Charles Brook, at the outer end of the Bay of Exploits, and one other which he did not name. His brother George said that when he revisited the

area, in 1770, Charles Brook had also been occupied by the English:

"The crew here [that is, the English fishermen at Charles' Brook] consisted of three men only, and this was the first year they tried this brook . . . When the Salmoniers visited their nets this morning [July 13, 1770] they found that the Indians had stolen one fleet."[8]

Thus the Beothucks had lost all worthwhile salmon streams on the island by 1770. His report that they had stolen a fleet of salmon nets is also of interest, such incidents not being uncommon. It seems most likely that stealing was primarily a means of augmenting their food supply.

Notwithstanding concern about the fate of the Beothucks expressed by Governor Palliser in 1768, their numbers continued to diminish and another government expedition was sent to the Exploits area in 1810. It was commanded by Lieutenant David Buchan of the Royal Navy, who made two journeys up the Exploits River, one each in January and March of 1811. His report, however, adds little to the scanty knowledge of the role of salmon in the lives of the Beothucks. Unlike Cartwright's 1768 expedition, this one did meet with some Beothucks, two of Buchan's men being slain by them.[9]

By the late eighteenth and early nineteenth centuries, encroachments of settlers had confined the Beothucks to the area between the Exploits River on the east and Indian River, Hall's Bay, on the west. Even within that area, English settlers had established salmon and furring stations at or near the mouths of all worthwhile salmon streams. These denied the Beothucks access to some of their primary food gathering locations and accounted, in large part, for many of the incidents involving them and the settlers. The best known of these began in 1818 at a salmon post near the mouth of the Exploits River. The story is briefly related below as recounted in Howley.[10]

In the second decade of the nineteenth century and probably for some time prior, a man named John Peyton ran a salmon and fur post at Sandy Point near the mouth of the Exploits River. Important equipment of Peyton's, including salmon nets in 1814 and a boat in 1815, had several times been stolen by the Beothucks. The last straw apparently came in September, 1818, when a boat loaded with salmon was taken from his wharf at Sandy Point. It was recovered next day at Charles' Brook, stripped of all its equipment, though the salmon cargo was largely intact. Following this incident, Mr. Peyton was granted permission to lead a party of men up the Exploits River to attempt to recover his missing equipment. The expedition took place in January, 1819, much of Peyton's equipment being recovered. In the process, however, the Beothuck Mary March was captured and her husband slain.

Although official reports of this incident provide no significant knowledge about Atlantic salmon in the Beothuck's life, an anonymous letter published some years later says that, "To the Exploits River it was that the Red Indians came every summer for the purpose of fishing, the place abounding with salmon."[11] And, describing his observations at some wigwams at Red Indian Lake, the same author says:

"On entering one of the houses I was astonished at the neatness which reigned within . . . Beams were placed across where the roof began; over which smaller ones were laid: on these were placed a considerable quantity of dried venison and salmon, together with a little codfish."[12]

This latter comment, as well as that of Lieutenant Cartwright in 1768 of "a machine for drying salmon upon", indicates that the Beothucks preserved salmon for use beyond their immediate needs. So also does one of the drawings of Shanawdithit, last known survivor of the Beothucks, which shows several kinds of dried foods, one of which she identifies as dried salmon.[13]

These excerpts do not tell a great deal about the Beothucks' use of salmon, but do confirm it as an important item in their food supply. There is still no certain information as to how they captured them in any numbers, though it is difficult to imagine that a people ingenious enough to build miles of fence to facilitate the capture of caribou would not also have devised some simple means of harvesting salmon during their spawning runs to the rivers.[14]

Whatever use locally indigenous people may have made of the salmon resource, there is nothing in the record to indicate that their effect on salmon populations was other than entirely minor in comparison with the European fishery which began in earnest around 1700.

Footnotes

1 Ingstad 1969: 139.
2 *Ibid.*: 29, 30, 78–82.
3 Quoted in Howley 1915: 2.
4 *Ibid.*: 41.
5 *Ibid.*: 33.
6 *Ibid.*: 38.
7 See Townsend 1911.
8 Howley, *op. cit.*: 49.
9 Buchan's report is quoted verbatim in Howley: 70–91.
10 *Ibid.*: 91–129.
11 *Ibid.*: 96.
12 *Ibid.*: 100.
13 *Ibid.*: following page 246.
14 *Ibid.*: 31–31.

CHAPTER 2

Early Development of the Salmon Fishery of Insular Newfoundland

Touching the commodities of this countrie . . . there are and may be made divers: so yt it seemeth Nature hath recompensed that only defect . . . of some sharpe cold, by many benefits: viz. With incredible quantitie, and no lesse varietie of kindes of fish in the sea and fresh waters, as Trout, Salmons and other fish to us unknown.

HAYES NARRATIVE, 1583[1]

During the sixteenth century the migratory fishermen of several nations pursued the fishery for cod around the coasts of Newfoundland. By the early seventeenth century, contenders for this prize had been reduced to two, the fishing ships of England and France.

Ships and crews engaged in this fishery all returned to their home ports in Europe in the fall or early winter of each year, with the probable exception of a few men. These winter crews had the job of making ready for their ship's return the following spring, the places which they inhabited being the precursors of eventual year-round habitation. Because St. John's was a focal point of the early fishery, it may be assumed that the small rivers and streams emptying into its harbour and nearby Conception Bay were amongst the earliest to yield their salmon bounty to this wave of hungry Europeans. By the same token, they would also have been among the first to be adversely affected by these same people.

Crews of the early transient fishing ships also took salmon during the fishing season. Captain Edward Hayes of the *Golden Hind*, the only ship of Sir Humphrey Gilbert's 1583 expedition to complete the voyage and return home, says that, while at St. John's, Gilbert required other ships to contribute to his provisions and, "We were presented with . . . sundry delicacies. Also we wanted not of fresh salmon, trouts, lobsters and other fresh fish brought daily unto us."[2]

This was before any permanent settlers were known to be in Newfoundland though, as indicated, some winter crews were probably staying over at the most frequented harbours. The first official attempt at settlement began in 1610 with the establishment of John Guy's colony at Cupids in Conception Bay. It was soon followed by others, notably at Trepassey in 1616 and Ferryland in 1621. Within a few decades all had run their course, but many of their several hundred colonists undoubtedly remained to form the nucleus of some of the earliest settlements.

These colonists exploited populations of salmon and trout in nearby streams and John Mason, Governor of Guy's colony at Cupids around 1618–19, said in his *Discourse* that there were, "in some partes pretty store of salmond . . . ."[3] Sir William Vaughan, of the Trepassey colony, reported in 1626 that the products of the colony included salmon.[4] And Sir Richard Whitbourne, in Newfoundland during Gilbert's visit and again in 1618 as Governor of Vaughan's colony, said:

"The Rivers also and Harbours are generally stored with delicate fish, as Salmons, Peales, Eeles . . . and Troutes the fairest, fattest, and sweetest, that I have seen in any part of the world."[5]

During the seventeenth century, the area of the English migratory fishing ships was mainly from Cape Bonavista southward to Cape Pine. The surgeon on one such ship using the harbour at Renews, just south of St. John's, wrote in his diary in 1663:

"The harbour we were in was very much renowned for a good fishing place . . . At the Head of this river are many salmon; we caught abundance and our master saved several hogsheads and dried abundance in the smoke."[6]
(A hogshead is estimated to have held 300 lb of dressed salmon. "Several hogsheads", therefore, was a substantial amount.[7])

By 1675, English settlement had expanded to the point that the sponsors of the Newfoundland ship fishery, the "Western Adventurers", were concerned that their interests would be adversely affected. As a result, the naval governor for that year carried instructions to remove all English settlers, then numbering about 2 000, from the colony. However, Sir John Berry, the governor involved, allowed them to remain. In 1677 a law was passed which required captains of British convoy ships to Newfoundland to provide information on certain "Heads of Inquiry" relating to the population and industry of the colony. The resultant reports, usually referred to as "Returns of the Fishery", but sometimes as "Schedules" or "Schemes" of the fishery, were continued by their successors and are more or less continuous with present day data.[8] The record is not complete, especially for the earlier years, the first known salmon figures being for 1723.

Until about the end of the seventeenth century, English settlement in Newfoundland was largely concentrated between Bonavista and Trepassey, and small salmon rivers in that area would have been well known and exploited. At that time, fishing for salmon was incidental to that for cod. Towards the closing years of the century, however, settlers began to move Bonavista and Notre Dame bays to exploit the salmon populations for their own sake. By then, small salmon rivers of Conception and Trinity bays had been fished for well over 100 years and their original populations probably much reduced. A few slightly larger salmon rivers of the area south of St. John's and in Trepassey Bay may have fared a little better. After the Treaty of Utrecht, in 1713, English settlers began to spread slowly westwards along the south coast. It was mid-century before they rounded Cape Ray and began to fish the excellent salmon rivers of the Codroy and Bay St. George areas.

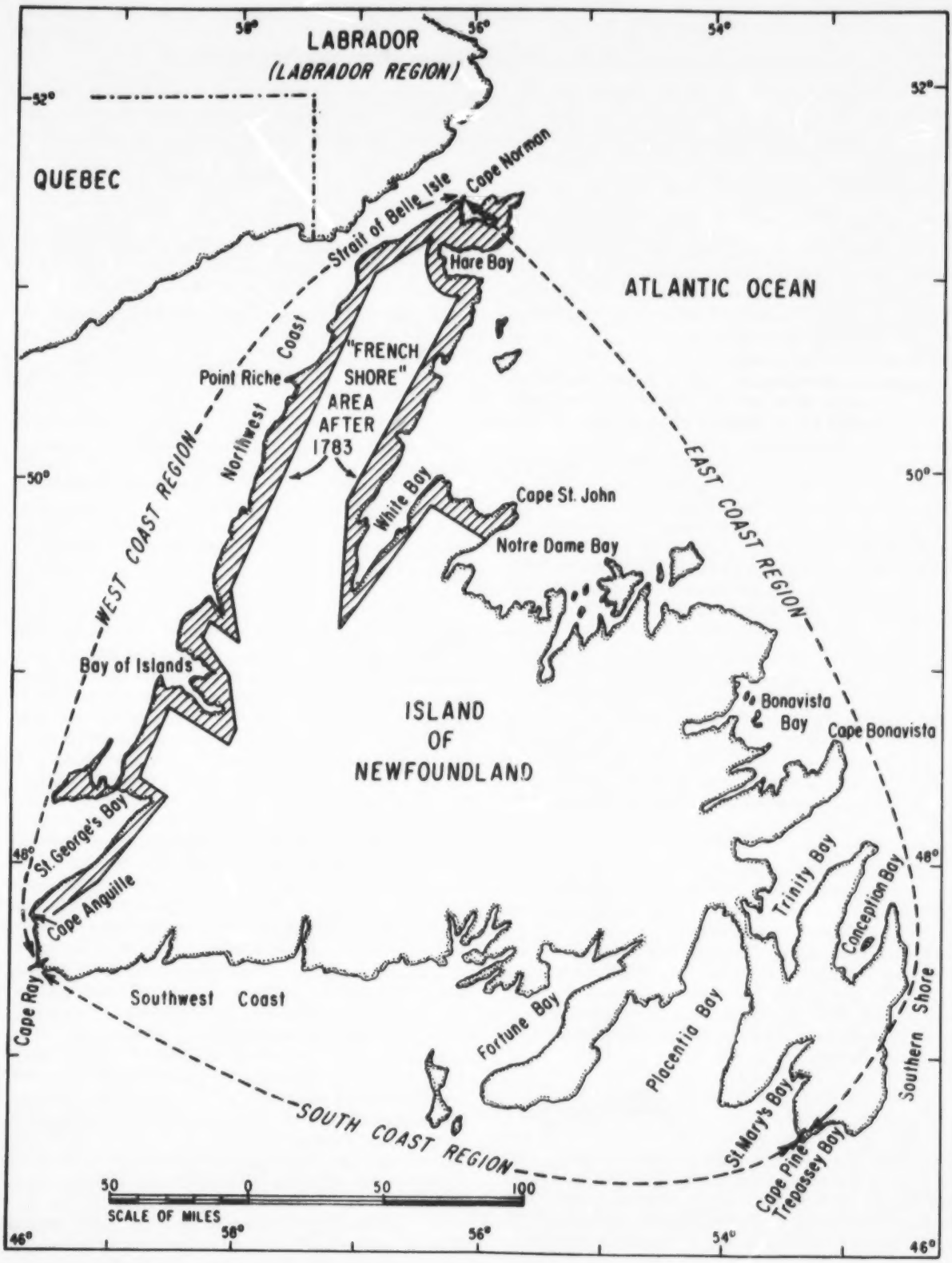

FIG. 2.1. The several "regions" of the province used in this study, together with the "French Shore" as it was from 1783 to 1904.

Exploitation of salmon runs in these days was at or near river mouths and usually occupied about 4 months of each year, leaving the remainder for activity such as furring. Indeed, a prime magnet that drew settlers to the northern areas with all their problems, including hostile Beothucks, was the prolific salmon runs of their rivers. Until that time, their lack of proximity to the cod grounds and hazardous approaches for sailing ships had sheltered them from the transient fishery. English settlement north of Bonavista was also delayed by the fact that the area was considered the domain of French fishing ships, though the coast east of Cape St. John was little frequented by them at that time.

The early salmon fishery began as a weir and seine fishery in the rivers and estuaries. Head describes it as follows:

"Early in the year men went to the salmon streams, and began construction of weirs to block the . . . spawning fish. The peak of the run was about July, and as the salmon . . . pooled below their weirs, the men caught them in seines. No thought appears to have been given to allowing the fish to get to the spawning grounds in order to perpetuate the stock, the major worry was other salmon fishermen."[9]

Exactly when the gill net fishery began in river estuaries and along nearby coasts is unknown, but "stake nets" were in use quite early in the game. These latter, probably originally used in areas impractical for weir construction, were gill nets strung on posts (stakes) driven into the river bottom, frequently at the tidal area near the river mouth. The first reference found to floating gill nets was to their use in the Bay of Exploits in the 1760's and in large Labrador rivers and their estuaries in the 1770's. All of these devices were a legacy that transients and settlers brought from their European homelands where they had been in use for centuries.

For more detailed description of the development of the early salmon fishery in the island portion of Newfoundlandand and Labrador, the area has been arbitrarily divided into the following regions (Fig. 2.1):

(1) *The East Coast Region*, extending from Cape Norman by the east to Cape Pine, the western boundary of Trepassey Bay. It includes the early settlement area from Cape Bonavista to Cape Pine.

(2) *The South Coast Region*, extending from Cape Pine westward along the south coast to Cape Ray.

(3) *The West Coast Region*, encompassing the area from Cape Ray northwards to Cape Norman, all of which was at one time part of the "French Shore".

Development of the commercial salmon fishery in Labrador, in some respects quite dissimilar to that of the island portion of the province, is assigned a chapter of its own.

The East Coast Region

With the possible exception of the Placentia area during the seventeenth century, the history of the Newfoundland salmon fishery before 1700 is largely that of the East Coast Region. Salmon exploitation on other coasts, whether by settlers or by fishing ships, seems to have begun sometime after 1713. The area north of Cape Bonavista became part of the "French Shore" (Fig. 2.1) by the Treaty of Utrecht, though in 1783 (Treaty of Versailles) the area from Cape St. John eastwards to Cape Bonavista was removed from French influence.

English settlement in Newfoundland began where the early ship fishery had concentrated, the latter continuing along with it for many decades. This was the so-called "core area" from Cape Bonavista to Cape Pine.[10] It included scores of small streams, their drainage area ranging upward to a hundred square miles or so, some of which still contribute to the recreational and commercial salmon fisheries. And although there was some exploitation before any settlement took place, with the possible exception of such well-patronized places as St. John's harbour, it probably required year-round settlers to significantly affect salmon and trout runs. Even so, small streams would have been vulnerable to the weirs and seines of the time and it is likely that many were rapidly denuded of their salmon runs.

By about 1700 settlers had begun to move beyond the "core area" and:

"English settlements were gradually extended northwards from Bonavista; and some of the first liviers . . . had . . . built their huts as far north as Twillingzte, Exploits and Fogo."[11]

During this northward expansion pioneer settlers began to exploit the salmon and fur resources of the larger rivers on the west and north sides of Bonavista Bay, from where there was a natural progression to the streams of the "Straight Shore" and Notre Dame Bay.[12]

A pioneer in the commercial salmon fishery in Newfoundland was a man by the name of George Skeffington who had a salmon fishery north of Bonavista in 1705. He was assisted financially by James Campbell, a prominent St. John's merchant, in the amount of 160 pounds, which represented, "A salmon fishery with all necessarys belonging thereto, such as salt, saines [*sic*] boats, etc."[13] When the French attacked Bonavista in 1705, Skeffington was commandant of its defences. Historian Rogers says that he surrendered his post and ransomed himself for 450 pounds.[14] Notwithstanding, he continued to be involved in the salmon fishery and may have been living at the mouth of Indian Bay River, Bonavista Bay, in 1720, though his supply base was still at Bonavista.[15]

The fisheries on these new rivers were no doubt quite productive for the first few years but as other settlers moved into the area there was competition for the available fish, such that one group of fishermen petitioned the Commodore in 1719:

"That if any man stops a river so yt the salmon can not get up he may not be molested by any persons wt so ever in drawing with nets or otherwise taking of salmon in any part of

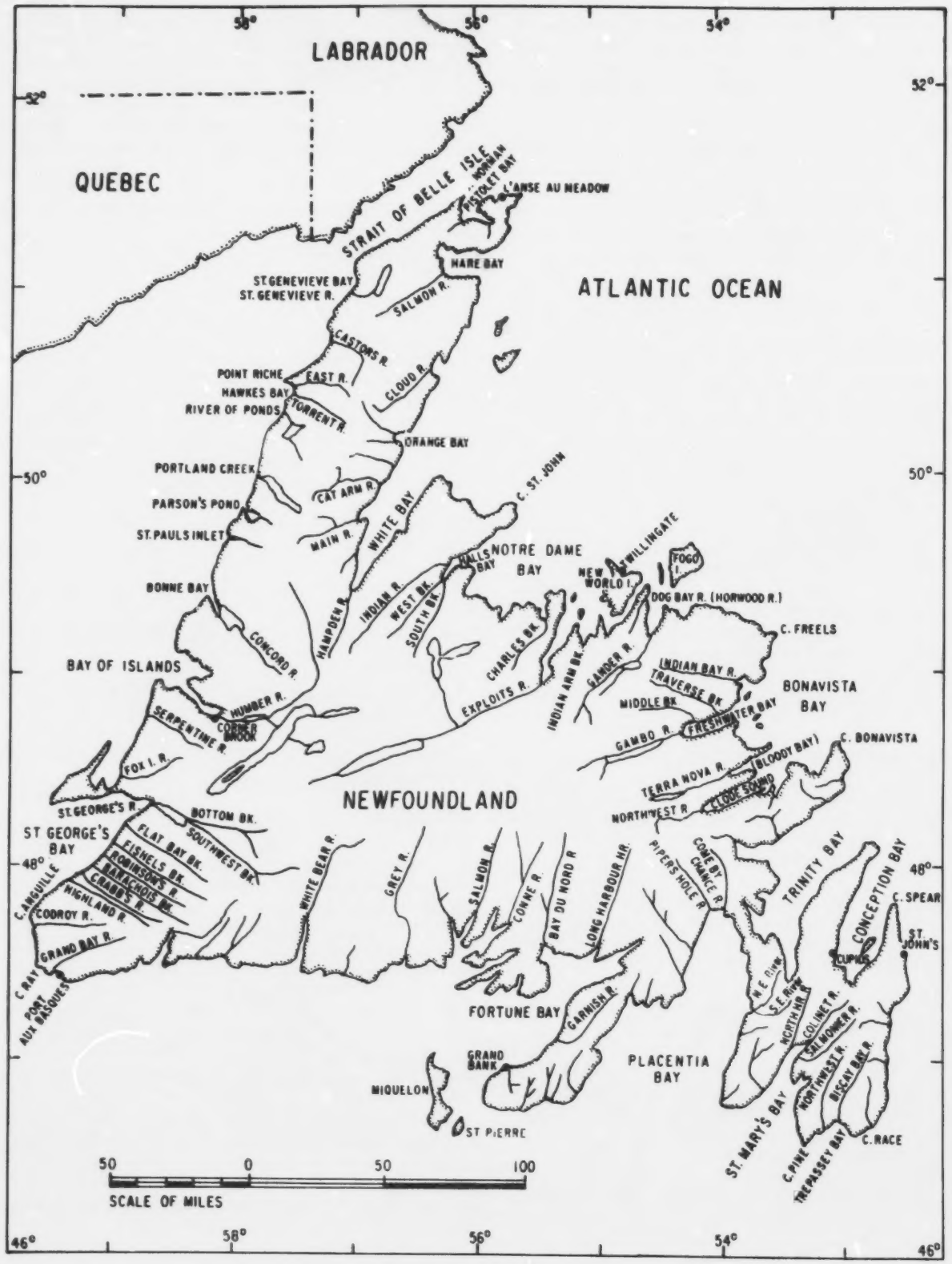

FIG. 2.2. Major rivers and groups of rivers of insular Newfoundland.

ye River for they may be as lawfully termed his as the cod fish under water at the hooke and line."[16]

It was probably this sort of competition that gave rise to requests for sole rights such as Skeffington was granted in 1723. Reeves reports it as follows:

"Another question, as to the right of property at Newfoundland, arose upon the *salmon fishery*, which had been carried on and improved by *Mr. Skeffington* between *Cape Bonavista* and *Cape John* in a part never frequented by any fishery ships; he had cleared the country up the rivers for forty miles and had built houses and stages. This person applied for an exclusive grant of this fishery for a term of years . . . The board accordingly recommended to his majesty, that a term of 21 years, in a sole fishery for salmon in *Fresh-Water Bay, Ragged Harbour, Gander Bay and Dog Creek*, might very well be granted . . . with liberty to cut wood and timber in the parts adjacent, provided it were six miles distant from the shore."[17]

The grant apparently became effective that same year. The places mentioned are still easily identifiable, Freshwater Bay being the arm of Bonavista Bay which receives Gambo River, Middle Brook, and Traverse Brook; Ragged Harbour, a small bay of the same name which receives Ragged Harbour River; Gander Bay, that which receives Gander River, one of the best salmon rivers on the island; and Dog Creek, which used to be known as Dog Bay River and now usually as Horwoods River, which flows into Dog Bay just west of Gander Bay. All still carry valuable salmon runs, despite having been fished for more than 250 years.

George Skeffington sold his concession in 1729, by which time the fishery extended to the Bay of Exploits and to Halls Bay.[18] By then some of the earlier "salmonries" to the east and in Bonavista Bay may have been showing signs of depletion.

Aside from the usual hazards, fishing on these rivers had the additional one of hostile Indians, Rogers reporting one of Skeffington's men killed by Beothucks in 1724.[19] Head says that three were killed that year.[20] Howley reports six Europeans killed at the mouth of the Exploits River as late as 1760.[21] Some idea of the temper of the times, and of the rights of property owners in these days, may be gleaned from Rogers' report that in 1725 a Captain Bowler caused Englishmen who disturbed the salmonry to be whipped.[22]

While these activities were taking place in Bonavista and Notre Dame bays, commercial salmon fishing was also beginning in Trepassey Bay where, in 1723:

"John Masters, an eminent merchant of St. John's . . . and one Phillip Watson established . . . a salmon fishery . . . on the Biscay Bay River just east of Trepassey. The first notice of this endeavour came in 1723, and by the next year they were paying out wages of 300 pounds to 16 men for its operation."[23]

Prior to 1713, Trepassey Bay had been a zone of transition between English fishing ships of the east coast and French interests on the south, but when the French pulled out after 1713 English ships and settlers began to move in. There may even have been a few English in that area late in the seventeenth century.[24]

By 1736–39, Newfoundland salmon production was about 1000 tierces yearly. (The tierce, a large wooden barrel of 42 "wine gallons" — see discussion Chapter 4 — is usually converted in Newfoundland records on the basis of 360 lb round weight.) This was from the east side of the island which by the 1760's and 1770's sometimes produced almost twice as much. Most, as previously, came from the Bonavista district and the combined Fogo and Twillingate district, each averaging about 500 tierces annually.[25] By then, the south coast had entered the picture and the first settlers had also begun to fish south of the Port au Port Peninsula on the west coast.

The following discussion documents the pre-1910 salmon fishery of important east coast rivers or groups of rivers (Fig. 2.2). It begins with the Terra Nova River, the first large stream encountered moving northwards from Bonavista.

Terra Nova River

Though the seventh largest river on the Island of Newfoundland, the Terra Nova salmon run has never been commensurately large due to natural barriers on the main stem and first major tributary. George Skeffington, who applied for sole salmon fishing rights in several other rivers in that general area in 1723, was apparently not interested in it.

The first specific reference to Terra Nova River salmon found in the course of this study was by J. B. Jukes, Newfoundland's first geologist, who visited it in 1840. At that time Alexander Bay, into which Terra Nova River flows, was known as Bloody Bay, and Terra Nova River as Bloody Bay Main Brook. These names may have derived from meetings with the Beothucks, according to one Rev. Mr. Wilson who said that, "a place called Bloody Bay . . . has often been named to the writer as a place where frequent encounters had occurred with the Red Indians."[26] Jukes said of the salmon fishery at the mouth of the river, that:

"On arriving at Bloody Bay Main Brook we found a very decent man named Stroud . . . He attended to the salmon fishery, which belonged to Messrs. Brooking and Garland, from whom he received regular wages, and a dollar for every tierce of salmon he caught. He had this summer caught forty-six tierces besides those consumed by his family. This was reckoned a great catch for the mouth of one river . . .."[27]

Stroud seems to have been the first settler in that area, having established some time between 1829 and 1834. He took nine tierces of salmon there in 1857.[28]

Mr. T. E. Collett, Magistrate at Bonavista, though not mentioning Terra Nova River by name, probably had it and others in that area in mind when he said in 1856 that the

decline in the salmon fisheries was due to the practice by fishermen:

"of planting their nets across the entire entrance of the Brooks . . . and thereby barring all access to them, not only with nets, but with Pounds, Gates, Frames, Trams and Hutches as well as Wieres, and not removing them until the salmon depart from their neighbourhood . . .."[29]

He recommended a closure from Saturday afternoon to Monday morning as the remedy.

The first warden's report for "Bloody Bay" was in 1872, when John Tiller advised the Colonial Secretary that he had found no infringement of the net regulations in that area.[30] In 1873 he reported that fisherman John A. Stroud, using 15 nets, took nine tierces of salmon, which sold at four pounds and five shillings per tierce, and about 20 salmon coming down river.[31]

At hearings of a Select Committee on the Salmon Fisheries in 1875, it was stated that 50 or 60 years previously Bloody Bay had yielded 100 tierces of salmon per season but was then yielding only four or five tierces.[32] That year's annual report said that five nets took eight barrels, each of 200 lb.[33] The report of another fishery inquiry in 1883 said that the principal rivers of Bonavista Bay, of which Bloody Bay River was one, were invariably stopped with nets.[34]

In 1892, the warden's position having apparently lapsed since about 1876, one was again appointed for the Terra Nova River, his duties extending as far north as Gambo River.[35] That same year the new railway reached the vicinity of Alexander Bay, as Bloody Bay had been renamed, and was connected to it by road. This link with the rest of the island encouraged development in the area and in 1893 a large sawmill began operation there.[36]

The first attempt to improve salmon passage on the Terra Nova River was made in 1904, being described as follows:

"the Board determined to make an effort to initiate . . . reform in dealing with obstructions in some . . . best known streams, with the following result: The first ladder was erected on the upper falls of the Terra Nova River."[37]

And indicating that work was also done on the lower falls, it said that fish passed up the lower ladder within half an hour after it was completed.

Although work done in 1904 probably eased salmon access over the lower falls, it is unlikely that any worthwhile number of spawners negotiated the upper falls prior to 1953 when a concrete fishway began operation. Indeed, even this latter installation required further work in 1961 to make passage reasonably adequate.

Freshwater Bay Rivers

The commercial salmon fishery of Freshwater Bay was amongst those granted to George Skeffington in 1723, and included Gambo River, Middle Brook, and Traverse Brook. Salmon stocks of all three have been fished since about 1700 when settlers began moving northward from Bonavista. Even though the Gambo River drainage basin is somewhat larger than either of the others, the productivity of all three, as measured by angling catch in recent years, appears to be about the same.

There is little information on the early Freshwater Bay fishery. However, Innis says that in 1786, "Lester and Company at Ragged Harbour, Dog Bay, Freshwater Bay, and Indian Bay with four boats and 14 men, took 335 tierces . . . of salmon."[38] The next report, in August, 1840, by Newfoundland's first geologist, said that:

"From Lockers Road we ran into . . . Freshwater Bay . . . and anchored at the bar of a large brook [Gambo River] that runs in at its head. At the mouth of this brook was a great salmon fishery, and there were several houses inhabited by men attending to the nets, and the coopers who made the casks for packing the fish . . . Some twenty or thirty years ago, there had been a large brick house here, the inhabitants of which owned the salmon fishery . . . but they had decayed and left the place."[39]

Several things are of interest in the above comment, not the least being that the fishery had earlier been rewarding enough to justify building a brick house, no mean feat in that area in these days. Also of interest is the implication that the fishery had earlier fallen on bad times but by 1840 was once more supporting "a great salmon fishery". Whether the decline had been due to overfishing, to natural fluctuations, or a combination of both, there is now no way of knowing. Certainly, the weirs and stake nets of the time could have reduced populations in areas that lent themselves to such practices, as did Gambo and nearby rivers.

The first salmon warden in Freshwater Bay was John Pritchett and a Pritchett family, perhaps the same one, "occupied" the river.[40] Using 35 nets of 4½ to 5 inch mesh, they took 21 tierces of salmon in 1872. Prior to the building of the mill, they used to get "half a voyage" there, but since that time had gotten only half as much.[41]

In 1874, 25 nets took 50 barrels of salmon at Gambo and a log "floom" [*sic*] in Gambo River was reported injurious to the salmon fishery.[42] That same year 20 nets in Freshwater Bay produced 33 tierces of salmon, the fish averaging about 2.5 lb each.[43] In 1875, the warden said that 25 nets took 45 barrels in that area. Two sawmills were reported operating on the Gambo River in 1876, a foretaste of things to come on it and many others.[44] That same year 25 nets took 25 tierces and 37.5 barrels of salmon.[45]

Captain W. R. Kennedy of the Naval Fisheries Protection Patrol wrote in 1880:

"A fine river, Gambo River, runs into the south-west part of the Bay and another smaller one on the west side [Middle Brook]. Both of these streams are ruined, so far as the salmon fishery is concerned, by two sawmills belonging to St. John's merchants . . . The upper mill, 2½ miles from the mouth, bars the river, and the salmon are unable to go up to spawn."[46]

Kennedy served the mills with the Governor's proclamation having to do with the barring of salmon streams. However, both mills were still in operation around 1895 when historian Prowse alluded to, "the fine mills of Messrs. John Murphy and Osmond" at Gambo.[47]

Some time after 1876 the practice of appointing wardens in the Gambo area was dropped. It was resumed again in 1892 when one was appointed for the general Terra Nova–Gambo area.

Indian Bay River

This river is mentioned in the early records as the place where George Skeffington may have been residing and conducting his widespread salmon operations in 1720.[48] In view of this stream's relatively good salmon productivity, it is surprising that so little has been recorded about its early fishery, the next known mention being for 1872. At that time it had the same warden as the Gambo area, one John Osmond.[49] The fishery that year, as for the previous eight to ten, was occupied by Adam and William Parsons who, with 20 nets barring two-thirds of the brook, took five tierces of salmon. In 1874, 12 nets took 12.5 barrels of salmon. In 1875, 10 nets took 26 barrels in the same fishery.[50]

Ragged Harbour River

This small salmon river is located in the little bay of the same name at the eastern end of Sir Charles Hamilton Sound. It, too, was one on which Skeffington was granted sole fishery rights in 1723.[51] Together with the salmon fisheries of Dog Bay, Freshwater Bay, and Indian Bay, it delivered some 335 tierces of salmon in 1786.[52]

Gander River

This, the third largest river on the Island of Newfoundland, is also one on which George Skeffington was granted sole rights in 1723. When first exploited by Europeans, being almost totally accessible for salmon production, its salmon run must have been an excellent one.

Systematic fishing of Gander River salmon began in the early 1700's. Indeed, when Skeffington's request for exclusive rights to its fishery was being discussed by officials in 1723, it was reported that he had, "spent twelve years, between 1708 and 1720 . . . in improving the salmon-fisheries north of Cape Bonavista . . .."[53] In 1719, he was reported in partnership with William Keen at Gander Bay,[54] and in 1725, with one of his competitors, Samuel Shambler, on the Gander River.[55] In 1729, Skeffington sold his rights on the Gander River fishery.[56]

The next record of salmon in the Gander area was in 1786 when, "Jeffrey and Street at Gander Bay with one boat and 6 men, took 400 tierces . . .."[57] This was the equivalent of about 120 000 pounds of round fish which, at a guessed average weight of eight pounds, represented about 15 000 individual salmon. Not all would be Gander River fish but the majority probably were, suggesting a resource of substantial size. Although salmon weirs and 4-inch mesh nets were used at most salmon fishing locations in 1786, only nets were reported at Gander Bay. At that time, the combined salmon fisheries of Ragged Harbour, Dog Bay, and Freshwater Bay yielded about 100 000 pounds annually, less than that of the Gander Bay area alone.[58]

Gander Bay was reported one of the important salmon fisheries of the colony in the early 1840's, salmon being, "taken from June to August, in stake-nets, placed at the mouths of rivers in bays and harbours . . ."[59] In October, 1842, there were only one or two houses at the head of the Gander Bay, the salmon fishery being prosecuted by men from the nearby islands of Fogo, Change, and New World.[60]

In 1855, a Select Committee on the salmon fishery received a report prepared by James Marmaduke Winter which said that, while rivers in many areas were barred by gill nets extending from one side of the river to the other, in the Gander Bay area:

". . . the people are obliged to drive stakes or piles into the bed of the river, to prevent the current from floating their nets; these piles extend to some considerable distance in the tideway, and up to the river; they use no weirs in this Bay, and, therefore their use cannot be assigned as the cause of the almost total failure of the Salmon fishery in this locality. I would here state that about 25 or 30 years since a vessel of between 200 and 300 tons used to be sent up this river, and annually take a cargo of some 1000 tierces of Salmon and proceed to market forthwith; when now, lamentable to state, not 30 tierces are caught there."[61]

In verbal testimony before the same Committee, Mr. Winter recommended that: the salmon fishing season close August 1 each year, net mesh size be not less than 5 inches, buoys have the owner's name on them, net stakes be removed by August 6, nets not bar the route to salmon rivers and have a set distance between them.[62]

Testifying before another Select Committee around 1860, a Mr. Warren repeated Mr. Winter's maximum catch figure and said that only 30 tierces were then being taken annually in Gander River. He also reported that the Atlantic salmon returned to its river of origin to spawn, though this was by no means common knowledge at that time.[63]

Thomas Peyton, appointed warden at Twillingate in 1871, said in his report for that year that Gander River had been purchased by William Hodder and Rob't Gillingham from Garland and Company, having been in the latter's possession for 50 years. He also said that an old resident could remember "nine hundred and odd" tierces of salmon being taken at Gander Bay Brook, but the average for the past 10 years had not exceeded 10 tierces.[64] In his 1874 report, warden Peyton said that nets took 40 tierces in the river that year, of 5–10 lb average weight.

In an 1875 letter to the Governor, the Director of the Geological Survey, Alexander Murray, also referred to pre-

vious high catches on Gander River, but said it was by then producing only 14–15 tierces each year.[65] His information was probably from the "Winter Report" quoted earlier. That same year was reported by the captain of H.M.S. *Swallow* as, "a very indifferent" year for salmon.[66] (On September 13, 1875, Captain J.E. Erskine in H.M.S. *Eclipse*, made wildlife history when he released a bull and a cow moose at Bussey Point, Gander Bay, the first such animals in insular Newfoundland.[67])

Captain Erskine's report on his magisterial functions during 1875 in the Gander area included comment about revisions to the Salmon Act, thus:

"John Harris and others complained of the hardship of new clause in Salmon Act, altering the size of mesh. It is hard also, they assert, for a poor man to have to set up a new net. Fish running small in this river . . . I think they have a legitimate grievance, and am of the opinion that the Salmon Laws require careful revision; they do not appear to me to be drawn up by people thoroughly acquainted with the subject."[68]

An 1875 report on timber lands in the Gander River area reported only a few settlers in Gander Bay, the furthest inland being one about a mile from the river mouth, who:

"sets his nets completely across the stream, where he keeps them during the whole time the salmon are going up the river . . . and I am informed that other rivers on the north shore are being barred the same way."[69]

However, when the Naval Fisheries Protection Patrol was in Gander Bay in July, 1880, Captain Kennedy reported a few families on the banks of the Gander River," living by salmon fishing and lumbering". Fortunately, he said. the river was too large for barring. His reference to "lumbering" suggests one or more sawmills there at the time.[70]

It is not certain when Gander River salmon catches first diminished from their earlier high levels but Adolf Nielsen, Newfoundland's first Fisheries Superintendent, refers in 1889 to "fifty years ago" as a time of high catches. This indicates that it may have been around the late 1830's or early 1840's, more or less in agreement with the "Winter Report" which indicated it to be around 1825–1830.[71] Nielsen's source may have been the "Rice Report" quoted following.

In a written report to an 1883 Fishery Enquiry, Mr. R. P. Rice said that the Gander River was the finest for salmon in Notre Dame Bay, its principal fishing stations having been purchased some 60 years previously by Hodder and Gillingham from Reid, Garland and Co., of Poole, England.[72] He also said that it had earlier produced 500–900 tierces annually and, for about 20 years after its purchase, about 100 tierces each year, sometimes more; also that it used to be "stopped" with weirs but the more recent fishery used nets. At the time of writing the catch was about 20–30 tierces each year.[73] Rice also authored a report *"On the limits of the estuaries of salmon rivers, for netting purposes for the year 1884"*, the outcome of a survey of Notre Dame Bay rivers which he did that year. This report, which recommended that river estuaries be defined and marked as a net fishery control measure, can be considered the originator of today's "Caution Notices".

When Mr. Nielsen visited the Gander area in late 1889, his report to the Commission said that although the river was an excellent one with no obstructions, yet:

"the barring of the river with stake-nets, the numerous nets employed in and outside the estuary . . . have caused this excellent stream to be . . . almost entirely depleted of salmon . . . If rivers are allowed to be constantly barred with stake-nets, or other engines of destruction, the number of breeding fish "that will escape . . . will diminish more and more each year, until at last the natural production of the salmon in such streams will be a thing of the past."[74]

He also said:

"In Gander River I was informed that there were eight salmon berths claimed by seven persons in all. These people fish in the river with stake-nets which they put out . . . about the 12th June, and . . . [take] in about the 8th August, each year. This past season, the catch did not exceed . . . sixteen tierces in all. Some fifty years ago . . . as high as 900 tierces were taken. The people who own these berths claim to have inherited them . . . but they have no papers or documents to prove such claims. . . They deny barring the river, but others accuse them of doing so. At Casey's Island . . . stake-nets are set out on both sides of the river, . . . and an open space is left . . . [for] boats and fish; but . . . other parties [say] that this opening was barred, during the greater part of the salmon season, by salmon nets.

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"At present there is a saw-mill in course of erection . . . about one mile above Salt Island. In order to prevent the logs from going down . . . the tributaries . . . dams are built across most of them . . . [The] millowners should be compelled to make a pass-way in each dam, large enough to allow any sized salmon to go through. Precautions should also be taken in regard to . . . timber in the river, in order that no blocking up should occur . . . Saw-dust or any other refuse from mill should be strictly prohibited from being thrown into the river."[75]

The annual catch in the Gander area at that time, Nielson said, was under 20 tierces, the large breeding fish seldom being seen, and only grilse of four or five pounds, or sea trout, being taken.[76]

Nielsen's reference to the sawmill was, apparently, to the first large mill to be built in that general area. However, the pace of change speeded up in 1893 when the new railway reached that area and two more mills began construction.[77] These mills and numerous others, with their associated logging and log driving on the rivers and streams, and the large forest fires which followed in their wake, were no doubt factors in the depression of salmon runs which occurred later.

Two river wardens were appointed in 1890, one each for Gander Bay and the Bay of Exploits.[78] The Fisheries Commission's 1892 report attributed the depletion of salmon stocks to, "barring of rivers, the destructive modes of fishing . . . ignorance, selfishness and cupidity . . ."[79] Referring to areas where wardens had previously been appointed, the same report said:

"In these naturally fine salmon rivers, the ruinous system of barring the streams, poaching, and the use of destructive small-meshed salmon nets, have been to a large extent suppressed and the obstructions being removed, salmon can ascend to their spawning grounds."[80]

The 1902 Report of the Department of Fisheries again took up the theme of salmon depletion. Whereas, it said, 80 years previously the Gander River salmon catch had been 2000 tierces (like most fish stories, it increased with time), and 50 years previously was 1000 tierces, at the time of writing it was less than 30 tierces.[81] Measures were taken to attempt to stem the decline, including the banning of nets below Salt Island and removal of all nets from the Humber and other rivers.[82]

Apparently, there was some improvement in runs for a few years. Prowse, referring to the former decline in catches, said that it was continuing to improve in 1911. He also said that Salmon Brook tributary was a "splendid salmon river, which affords fine sport up to the falls."[83] (Salmon Brook Falls, which must earlier have been largely impassable to migratory salmon, had a pool and weir concrete fishway built on it in 1955.)

Horwood River

This river, sometimes called Dog Bay River, and in the early days usually referred to as Dog Creek, was included in George Skeffington's 1723 grant.[84] With a drainage area of only about 150 square miles, it is one of a number of small rivers that in the past, for one reason or another, seem to have carried larger than average salmon populations. In this case, the fact that it was totally accessible to Atlantic salmon is part of the answer. Moreover, the size of commercial catches attributed to it in the remote past was at least partly due to its location in Dog Bay, a way-station for salmon enroute to Gander River and other nearby streams.

It seems likely that early fishing rights to Horwood River went with those of the nearby Gander River. By 1871, it was reported "occupied" by George Hodder for 55 years.[85] By then the annual catch was falling off, having averaged not more than 10 tierces annually for the previous 10 years. The "Rice Report" of 1884 said of Horwood River, that:

"Dog Bay, or Maxse River, as the inhabitants have lately named it, is a very fine salmon breeding stream, and though not as large as Gander River, is equally free from any natural obstructions to salmon on their way to the head waters . . . This river is annually stopped with stake nets during the salmon season. Its yield does not now exceed eight to ten tierces, not more than a tenth of that fifty years ago."[86]

The Newfoundland Fisheries Commission's Annual Report for 1889 said that Dog Bay River was a fine little river about 3 miles long and 100–200 yards in width, with no obstacles to prevent salmon from going right up to the pond from which it flows.[87] Although Horwood River is not now as prominent in the salmon fishery as it once was, probably due both to nineteenth century fishing methods and to logging on its watershed for many decades in the twentieth century, it still produces salmon for the commercial and sport fisheries.[88]

Campbellton River (Indian Arm Brook)

This small river was one of these most frequented by the Beothucks during the last century or so of their survival in Newfoundland. Even with all the detrimental activities that have occurred during the last two centuries, it still provides several hundred salmon annually to the angling fraternity.[89]

Campbellton River's relatively high Atlantic salmon abundance made it valuable to Indians and Europeans alike, and their paths sometimes crossed on it. Thus Howley tells a story, probably set in the second half of the eighteenth century, which shows more tolerance between Beothucks and Europeans than was often the case in these days. He quotes from the Rev. Wm. Wilson, a Wesleyan missionary in Newfoundland, as follows:

"Thomas Peyton, son of the man who captured Mary March, told me that . . .[a] man named Genge . . . lived alone at a place called Indian Arm, [and] frequently saw the Red Indians . . . Genge used to put out a salmon or other food for them through a trap in his door, and they, understanding it was so meant, would approach and take it away. They never harmed . . . this man, except to visit his weir or nets and take out a salmon to eat . . . they would come while Genge was present at one side of the river and from the other side, run out on his dam and dexterously spear a fish and make off with it."[90]

Innis reports that John Slade Jr. and Company took 60 tierces of salmon from Indian Arm Brook and Dog Bay River combined in 1786.[91] Salmon warden Thomas Peyton reported on the early ownership of Campbellton River as follows:

"Indian Arm River, situate at the bottom of Indian Arm, the South side of Exploits, was formerly owned by Garland & Co., and was sold by them to John Ginn, on or about 1816, who fished the river for years . . . the old gentleman . . . told me that the second year he fished it he caught 90 tierces of salmon . . .. John Ginn sold his right to Joseph Hornett, and the river is now claimed and occupied by a widow of that family. The river was fished as formerly by stopping with weirs until about 20 years since, when the man who occupied the river, William Hornett, having no assistance, was unable so to do, but still continued to stop the river with nets, the quantity of salmon taken each year decreasing until he considered it a medium voyage, if he got from 4 to 5 tierces."[92]

Warden Peyton reported that 12 tierces of salmon were taken at Indian Arm Brook in 1873 and 10 tierces in 1874.

Exploits River

An early Church of England Missionary in Newfoundland, Reverend Louis Amadeus Anspach, suggests the origin of the name of this river, and of the bay into which it flows, when he refers to, "The Bay of Exploits, probably so called from successful rencounters with the native Indians who are said to frequent it during the summer season . . .."[93]

The fact that the Bay of Exploits was the favourite hunting and fishing grounds of the hostile Beothucks delayed establishment of settlement in its southern part longer than would otherwise have been the case. Indeed, it was not settled, except at the outer fringe, until the late eighteenth or early nineteenth century.

The Bay of Exploits was not included in George Skeffington's request for sole rights to the salmon fishery of a number of areas in 1723. However, Prowse says that around that time it extended to Exploits and various other rivers in Notre Dame Bay.[94] The initial fishery was probably conducted from centers such as Fogo and Twillingate by fishermen who returned home in late summer or early fall each year. Later on, some of them moved to Exploits Burnt Island and fished and trapped in the bay and river in season. Still later, perhaps in the early nineteenth century, family habitations were built in the Bay itself. Lower Sandy Point, some 12 or 15 miles from the mouth of the Exploits River proper, seems to have been one of the first such year-round sites.

Knowledge of the fate of early European visitors to the Exploits area, such as that of a Captain Scott and five of his crew who were killed by the Beothucks around 1760, discouraged prospective settlers. Howley has more detail on this story:

"About the year 1760, one, Scott, with another shipmaster and a strong crew, went from St. John's to the Bay of Exploits . . . during the summer season. Scott and his party having . . . built there a place of residence, in the manner of a fort. Some days afterwards, a large party of Indians appeared in sight, and made a full stop, none of them showing the least inclination to approach nearer. Scott then proposed to the other shipmaster to go among them; the latter advised to go armed. Scott opposed it on the grounds that it might create alarm. He proceeded towards the Indians . . . without arms. Scott went up to them with every sign of amity . . . taking several of them, one after another by the hands. An old man, in pretended friendship, put his arms around his neck; at the same instant, another stabbed Scott in the back. The war whoop resounded, a shower of arrows fell upon the English which killed the other shipmaster and four of his companions. The rest of the party then . . . returned to St. John's, carrying one of those who had been killed with the arrows sticking in his body."[95]

In 1768, Governor Palliser authorized the expedition to the Exploits area, led by Lieutenant Cartwright, referred to earlier.[96] There were no European settlers in the Bay of Exploits at that time,[97] and only "Charles River and one other" were left to the Beothucks. They were dispossessed from both within a few years, the English having taken over the rest.[98]

From the late 1730's onwards, the Fogo and Twillingate Districts (which included the Exploits and Gander areas) produced varying amounts of salmon for export. In 1775 the amount was 2000 tierces (more than 700,000 pounds of live fish), requiring significant fishing effort, some of which was in the southern part of the Bay of Exploits.[99] One of the fishermen in 1790 may have been, "one Peyton, who for many years has possessed a salmon fishery in the Bay of Exploits, and at this time resides at some place near Poole in England."[100] This was probably the same man of whom the records state that in 1786, "Payton [*sic*] and Miller at River Exploits; and Charles Brook, with 2 boats and 6 men took 260 tierces."[101] At that time, in the southern part of the bay at least, the salmon fishery was still a seasonal one.

In the winter of 1810–11 another official attempt (also referred to earlier) was made to establish communication with the Beothucks via the Exploits River. The leader was Captain David Buchan, R.N., whose account, included in Howley, suggests that habitation in the most southerly part of the bay was still a seasonal affair.[102]

In 1818, a Mr. John Peyton and his son, John Peyton, Jr., had a salmon station at Lower Sandy Point in the Bay of Exploits, some 12 miles north of the Exploits River proper.[103] It was still there in 1827 when Bishop Inglis of Nova Scotia, after whom Bishop's Falls is named, visited the area. He reported that Mr. Peyton had, "twelve fishing stations for salmon along thirty miles of River". The "River", of course, was the Bay of Exploits and the river estuary. Bishop Inglis stopped at Exploits Burnt Island where Shawnadithit, a female Beothuck believed to be the last of her race, was "living in Mr. Peyton's family."[104]

A Select Committee of the Newfoundland Legislature received evidence from a Mr. Henry Knight in 1856 that salmon in "Exploits Waters" and Gander Bay was taken with nets, the only place he knew weirs to be used being in Halls Bay.[105]

The first warden for the Exploits River area appears to have been appointed in 1871. He was Mr. Thomas Peyton, and his district included the whole area from Cape Freels to Halls Bay, for the patrol of which he was paid the sum of 40 dollars per year! The following quotations from his 1871 report indicate an intelligent appreciation of the salmon fishery and of the problems which, even then, were beginning to beset it:

"EXPLOITS RIVER. — There are three principal breeding rivers or brooks in this Bay . . . viz: Northern Brook, Peter's Brook and Rattling Brook; . . . no net of any kind whatever ought to be allowed to be set nearer than one quarter of a mile to the mouth of these brooks at any season of the year . . . Whilst at the River Exploits great complaints were made to me respecting the great quantities of . . . drift timber driving about the Bay from the mill, one man telling me that he was obliged to take up his nets for one whole day in consequence thereof . . ..

"Whether the saw dust from the mills has any injurious effect on the salmon fishery or not, I cannot say, but . . . [when] I was conducting the salmon fishery at that place for my father . . . the usual average catch was from one hundred and twenty to one hundred and fifty tierces for 10 men; after the mills were in full operation for a few years the fishery dwindled down to thirty tierces for the same number of men and nets . . ..

"In conclusion, I would beg to remark, and I speak from fourteen years' experience of the river fishery, that if the present system of taking salmon by stopping the brooks with nets and other obstructions are not speedily put a "stop to, the river fisheries will be utterly destroyed, and would respectfully recommend that Wardens should be appointed in the immediate vicinity of each place . . .."[106]

Warden Peyton's 1872 report included the following:

"I left Twillingate, July 25th, and visited the Exploits Bay and Rivers . . . and am glad to say that there has not been any serious infringement of the Act in these localities the past season; at the same time I regret to add that the catch of salmon has not been so productive as last season, 1871, more particularly on the outside or deep sea fishery. I regret to be again under the necessity of bringing before your notice the large quantity of crip and loose drift timber drifting about the Exploits during the salmon season; this nuisance is much complained of by the fishermen, and not without good reason . . ..

"I have also been informed . . . that there is a boom . . . built across the mouth of Peter's Arm River for the purpose of confining . . . logs during the coming season; this will do no injury if the logs are removed at a proper time, say the 12th of June . . . as it is the first run of large salmon that enters the bays, goes up the rivers to spawn, and . . . Peter's River was always considered the breeding ground for salmon in the Exploits . . . There is a great diversity of opinion respecting the failure of the bay or river fisheries . . . Some are foolish enought to assert that stopping the brooks does not injure the fishery, saying that some fish will pass up however you may stop a brook; of that we are perfectly aware, if it was not so the salmon would have been destroyed long ago . . . Taking into consideration that the main river has never been stopped, it is my opinion that the salmon never deposit their spawn in the main river, or if they do so, it is all swept away the first flood. It is true the salmon go up the river as far as the falls [Grand Falls], there they are stopped as from the nature of the falls it is impossible for them to get up any further . . . There is a large river flowing in on the South side of the main river about eight miles below the fall – the great Rattling Brook – lots of salmon go up this river, but on getting up four miles or so from the mouth of the river there is a ledge of rocks running across, making a fall some twelve or fifteen feet high; when the river is not flooded these rocks form a complete barrier to the fish getting up, as you may walk across on the rocks. I have been at this place in the latter part of August and have seen hundreds of salmon in the pools of water below waiting, as I suppose, for a flood to get up the river, and it must be a pretty heavy flood to enable them to do so . . . In my opinion any stream or river where it will not materially effect the voyage of the fisherman, ought to be kept free of nets altogether . . .."[107]

Warden Peyton listed 13 salmon berths and their owners in the Bay of Exploits in 1872, all using gill nets. The average catch per man was six tierces, or about 78 tierces in all, the average weight being 6–8 lb.[108] He reported 90 tierces taken in 1873, but there were problems with the sawmill at Peter's River.[109] In 1874, 15 fishing stations took about 90 tierces of salmon, the average weight being 6 lb.[110]

In March, 1875, before another "Select Committee on the Salmon Fisheries", salmon nets were said to be set in the Bay of Exploits each year from around June 15–20 to about August 1–5. They were set from shore in a "fork" or "V" form, 5½-inch mesh being used early in the season and 4- to 4½-inch mesh later on.[111] Alexander Murray, Director of the Geological Survey, before the same Committee, emphatically condemned barring of rivers and advocated leasing them for rod fishing.[112] In a letter to the Governor earlier that same year, he said that the Exploits catch had fallen from 300 to 400 tierces "some years ago" to 12 tierces in the 1870's![113]

Captain W. R. Kennedy of the Naval Fisheries Protection Patrol reported a sawmill near Peters Arm in 1881. He visited both Bishop's Falls and Great Rattling Brook, "a fine salmon river", and continued on to the Grand Falls where, "numerous seals reposed upon the rocks, or were disporting themselves in the whirling rapids, shouting to each other . . .."[114]

Kennedy was much impressed by Grand Falls and wrote:

"Seating ourselves beside the fall, we contemplated this fine sight, not a living soul to interfere with us . . . here everything stands as God made it, long may it continue so.

"Possibly, with the completion of the Railway, we shall have a station at Exploits River and a hotel at Grand Falls; but for the present let us rest content that we have seen, without question, the finest picture in Newfoundland, untouched by the hand of man."[115]

Kennedy's Grand Falls lasted only until the coming of a pulp and paper mill at that place in the early 1900's. However, his hope for a hotel has been more than answered in recent years, though few guests would recognize the falls today from his description.

By the early 1880's there was a noticeable decline in the salmon fishery, it being reported in 1883 that whereas: "some years ago the annual catch on the Exploits varied from three to five hundred tierces . . . Now the annual catch rarely exceeds twelve tierces . . .."[116]

In 1884, Mr. R. P. Rice said of the Exploits River that:

"Next in importance [to Gander River] stands Exploits River with its tributaries, which during the early part of the proprietorship of the late John Peyton, yielded from one to three hundred tierces annually, but now seldom reaches twenty tierces. The main stream of this river never was nor could

be stopped, but the smaller streams that flow into it have always been barred formerly with rick work, latterly with nets, excepting Peter's Brook, which previous to the establishment of the first saw-mill there, by one Gibbons, was always looked upon as the great salmon-breeding river of Exploits, and no weir or other contrivance for taking salmon, as a rule, was ever set there in those times, but although there has been no saw-mill there for many years, this stream is in no better condition at the present time for receiving salmon than when the mills were in full operation, it being continually barred and encumbered with logs . . .. These obstructions . . preclude any possible ingress or egress of salmon."[117]

In November, 1889, the Bay of Exploits was visited by Adolf Nielsen. He reported as follows on a Mr. Beaton who had a salmon station about a mile south of Peters Arm:

"Mr. Beaton has carried on salmon fishing since 1840. His opinion is that the decline of the salmon fishery in this fine river is owing to the nets and traps which are set along the coast, in every creek in and outside the river . . . [The] catch of salmon . . . during the last season, did not exceed sixty tierces. In the river, the nets are usually put out a little after the 1st June and taken in about the 20th July."[118]

He also said, as others had earlier, that "not many years ago" the Exploits yielded over 500 tierces but by that time did not exceed 50 or 60 tierces. Following Nielsen's report, river wardens were appointed again to the Gander and Exploits areas, a practice which had been discontinued since the mid-1870's.[119]

First reference to erecting a fish "ladder" to enable salmon to proceed upstream beyond Grand Falls was found in the Annual Report of the Newfoundland Department of Fisheries for 1902, which said that, "it is . . . necessary that salmon ladders be placed on several rivers . . . The principal of these is the noble Exploits River."[120] And the Annual Report for 1904 noted that, having completed similar work on the Terra Nova River, "the working party . . . moved into Exploits, Grand Falls . . . [where] it was decided to use a dried-up backwater on the river."[121] They blasted a 500 foot "trench" over the falls, but the Annual Report for 1905 said, "The fish ladder at Grand Falls is not yet a success."[122]

Whether or not the "fishway" at Grand Falls would ever have accomplished its objective is unknown, because just one year after it was built hydro rights at the site were granted to a company which was building a pulp and paper mill nearby. By 1907, a control dam had eliminated any potential benefit from the salmon ladder. Similar rights were granted at Bishop's Falls and the first hydro electric unit was installed there in 1908. Again, a dam was built across the main river, but this time a small passage for salmon was left at its south end. Had this not been done, *finis* would have been written well over half a century ago to salmon runs which, in the 1980's, are just beginning to reach towards their full potential.

Construction of control dams at Grand Falls and Bishop's Falls were two features obviously detrimental to salmon in the early industrialization of the river. Another, unsuspected for many years, was pollution of the main river and estuary by wastes from the mill itself. The most widespread and most nefarious for about a half century, following which they began to be rectified, was the proliferation of logging dams and diversions on almost every tributary of the Exploits system. However, to the end of the first decade of the twentieth century, which concludes the period of this study, the Exploits River was still relatively unaffected by man's activities.

Halls Bay Rivers

Three salmon rivers flow into the southern part of Halls Bay. All have probably been fished by Europeans since the early decades of the eighteenth century. Prior to that time, they may have been occasionally fished by transient fishermen from France and England, as well as by the Beothuck Indians and other indigenous peoples.

Howley records that the first five Europeans attempting to settle at Halls Bay were killed by the Indians, one being a Captain Hall after whom the bay was named. The grandfather of one of Howley's informants purchased the rights to salmon fishing in the brooks of Halls Bay for the sum of 90 pounds about 1772.[123] By that time, fishing was well under way and Innis records that, in 1786, "Charles Rousel at Halls Bay with one boat and four men, took 40 tierces . . .."[124]

The next recorded information is from the 1856 submission of Mr. James Winters to a Select Committee of the House of Assembly, which said:

"In Hall's Bay there are three large salmon brooks, in which weirs are constantly used; these weirs are placed across the river, so that top of the common or neap tide just reaches them; they are formed by placing a beam across the river; racks, resembling those in use in stables for horses, are formed about eight to ten feet long, which extend from the bottom of the river to the top of the beam, these run out from each side to within about three feet of each other, or extending to the deepest part of the river, where a passage is left for the ingress of the fish into a pound formed by extending the racks parallel with the banks of the river, to six or eight feet on either side, and crossed to meet their ends, forming a pound about six to eight feet square, the entrance to which . . . the fish can force in, but cannot return . . . so that the fish cannot escape that is once entrapped."[125]

Testifying before the same committee, a Mr. Thomas Knight said that Halls Bay was the only place that he knew of where salmon weirs were used.

The situation in Halls Bay rivers did not change much in the next decade or so, except that nets were substituted for weirs. The first salmon warden was appointed for that area in 1871, and said in his report for that year:

"At Hall's Bay there are three salmon brooks or rivers, viz: South Brook, West Brook, and Indian Brook, at present occupied by Henry Rowsell, Sr. and Sons and has been in the Rowsell family for upward of 94 years. On my arrival, I found the principal entrance of each of these rivers barred with nets . . . I then gave him a copy of the Proclamation; he then

removed his nets to the required distance, viz: one third across the stream. Last season Rowsell caught at these rivers 30 tierces salmon, average catch last ten years 7 tierces; formerly 50 or 60 tierces was considered a medium voyage."[126]

"Stopping the river with nets" yielded Rowsell 20 tierces of salmon in 1872,[127] and he was similarly active from 1873 to 1875.[128, 129] A sawmill was reported at the mouth of Indian River in 1874. The average weight of salmon taken from Halls Bay rivers in these years was three pounds each.[130]

Commander E. Drummond of the Naval Fisheries Protection Patrol described the situation in Halls Bay in 1875 as follows:

"There are three salmon rivers at the head of this bay of which Indian Brook is reported the best, and they have all been poached for upwards of half a century by a family by the name of Russell [*sic*]. Uriah Russell, who fishes Indian Brook, stated his average catch as from sixteen to twenty tierces, and that the size of the fish had much decreased".

Drummond also found Indian Brook barred by nets, and was informed that upwards of a hundred salmon nets were set within a mile of Indian Brook.[131]

Capt. W. R. Kennedy was in Halls Bay in 1880 and 1881, a large forest fire having swept the lower part of the Indian River just before he arrived in the latter year. His crews did what they could to help the settlers whose homes had been burnt.[132]

In 1884, it was reported that "Hall's Bay River" (Indian River) was stopped throughout the salmon season and, "instead of hundreds of tierces as formerly, its annual yield of late years rarely amount to tens."[133] Two years later, Indian River was described as the finest in Halls Bay: "It has however, of late . . . sadly deteriorated until the fishery has become little more than nominal."[134]

Although Indian River was in poor shape when the foregoing was written, it had at least partially recovered when Prowse wrote in his *Newfoundland Guide Book, 1911* that Indian Brook, "is a splendid trout and salmon river, especially under the fall, about three miles up its course." South Brook, he said, was a good trout stream.[135]

White Bay Rivers

The first Europeans to exploit the salmon rivers of White Bay were, as elsewhere, the crews of English and French fishing ships that had frequented the area since the early sixteenth century. The fishery by settlers most likely began sometime during the first half of the eighteenth century, probably as a seasonal operation conducted by fishermen whose homes were within convenient sailing distance to the east or north. Innis records that in 1786:

"British subjects in White Bay with salmon brooks and fishing rooms were warned [by the French] to remove their fixed establishments, as occurred in the case of two Englishmen at Sops Arm. They had 2 boats and 5 hands who took 290 tierces in 1786."[136]

These activities by the French were related to the re-arrangement of French shore boundaries according to the Treaty of Versailles in 1783, and France's intensified effort to ensure exclusive fishing rights in areas that remained hers.

Howley indicates that the White Bay area was probably settled beginning in the early 1800's, its principal salmon fishery being at Main River, Sops Arm. The area was a favourite with the Beothucks and there, as elsewhere, their presence probably deterred settlement later than would otherwise have been the case. Even as late as 1818, Indians were reported to have stolen from settlers in White Bay, though these may have been Micmacs from Bay St. George.[137]

An 1872 report said that salmon caught at Sops Arm River were very small. It also reported the river formerly fished by the French, who had given it to William Pitman, the Pitmans having occupied it for some 80 years. Ninety tierces of salmon were reported taken there 30 years previously.[138]

Rivers of the "Petit Nord"

The designation "Petit Nord" is used to identify the area situated between the northern end of White Bay and Cape Norman. Major salmon rivers are in Orange Bay (Soufletts River), Canada Bay (Cloud River and Beaver Brook), Hare Bay (especially Salmon River), and in Pistolet Bay, on all of which the historical record is sparse. The area was fished by both English and French ships in the early sixteenth century, their crews probably being the first Europeans to exploit its salmon populations.

Beginning with the Treaty of Utrecht and continuing beyond that of Versailles, the French attempted to secure an exclusive fishery in the area remaining to them, including the Petit Nord. However, the Labrador based firm of Pinson and Noble was still in possession of the salmon fishery at Southwest Brook, Hare Bay, in 1786, though it would later revert to the French.[139] Indeed, French/English disputes over river fisheries in that area would continue for more than another century.

Upstream weirs were a favourite French salmon fishing technique, though seines and gill nets were also used in suitable areas. Testimony before a Select Committee of the legislature in 1856 indicated that weirs were still in use at that time,[140] and in 1875 geologist Alexander Murray wrote to the Governor that:

"in 1864, while I was in Croque Harbour, I saw the crews of two French Men-of-War engaged in sweeping the mouths of the brooks which empty into that harbour, with long seines, for salmon, the same brooks moreover being closely barred from shore to shore. In the same year, at . . . Canada Bay, I witnessed a Bar net, said to have been set by . . . a settler, which contained . . . something like eighty salmon, the larger proportion of which were in a high state of decomposition."[141]

The Naval Commander's 1872 Report included the comment that at "Croc" the French seemed to think that they had an exclusive right to the salmon rivers, while at Conche there was little interference from them. They also, it said, monopolized the salmon fishery in the Southern Arm of Hare Bay but the annual salmon catch had gone from 300 barrels to only about 80 barrels. Of the French Shore area in general, he said:

"the salmon fishery on this coast . . . is . . . very surely, becoming exterminated. In the bays, fleets of nets are frequently laid down, 20, 40 and even 50 at a time, and every inlet stopped; and if the fish should . . . be "able to pass the first barriers, the rivers are so obstructed by weirs, traps, dams and nets . . . that it is a wonder that this fishery has not long since come to an end."[142]

The Report for 1873 noted that the salmon river in Hare Bay, formerly fished by the French, was being fished by a Newfoundlander.[143] However, Commander Howorth posted the following notice at "Kirpon" in 1874:

"No English nets are allowed to be set in the sea upon the part of the coast where the French are allowed to fish, if they in any way interfere with the French rights of fishing; and any nets so set are liable to seizure."[144]

This action related to English enforcement of French rights as defined in the Treaty of Versailles.

The senior officer on the Naval Fisheries Patrol in the late 1870's and early 1880's, Captain W. R. Kennedy, commented on English-French problems in the salmon fishery in these years as follows:

"Not only do the French claim the exclusive right to the fishery [for cod], but they also claim to have . . . the power to exclude all others . . ..

"Not content with this, they lay claim to the salmon rivers . . . to fish them as they please . . . regardless of the fact that by so doing the rivers are ruined . . . One of the finest rivers on the coast, the south-west brook in Hare Bay, was regularly barred . . . from bank to bank . . . this man . . . had already taken 58 barrels of salmon (100 lbs to the barrel) . . . quite early in the season of 1879 . . .."[145]

The problem of French operations on salmon rivers ended with the 1904 Convention between Britain and France which terminated French rights in salmon rivers of the Petit Nord and elsewhere on the former French Shore.

The West Coast Region

The West Coast Region is that part of the Island of Newfoundland extending southwards from Cape Norman to Cape Ray. Some of its salmon rivers were amongst the last to be exploited by settlers, a process largely determined by British-French treaties and their interpretation over almost two centuries. Following the Treaty of Utrecht, the region was at different times, in whole or in part, included in the so-called French Shore, where French fishermen exercised rights granted them by that treaty and its successors. Prior to 1713 few, if any, settlers were on the west coast, though the fact that the treaty forbade French settlement, indicates that they may have been there earlier.[146]

After Utrecht, English fishing ships largely abandoned Newfoundland's west coast for more than 40 years. During that time the French exercised a virtual fishing monopoly over the whole area, and:

"fished for cod and salmon . . . occasionally stayed the winter, and sometimes lost themselves in the woods to escape the law . . . [They also] surreptitiously appropriated an extra two hundred miles of coastline . . .."[147]

MacNutt says of the same period that they:

"Driven from Placentia and the south coast of Newfoundland . . . made themselves familiar with the remote harbours of the north and west, finally finding good fishing grounds . . . in regions to which the English were complete strangers . . . [and] owing to English default the French acquired virtual control over the west coast . . .."[148]

The Seven Years War changed this substantially. With the commencement of hostilities in 1756, French fishing ships left the west coast and did not return until peace was restored in 1763. In the interim, English fishing ships occupied some former French fishing stations and British settlers began to move into the area between Bay of Islands and Cape Ray. The war was concluded by the Treaty of Paris which restored French fishing and landing rights on the west coast to their previous status. Even before the treaty was signed, Britain had appointed Captain James Cook to survey Newfoundland's coasts to delineate treaty limits and encourage English enterprise in the area. He began his west coast activity in 1764 and completed it in 1767. His Newfoundland surveys are described in the publication *James Cook in Newfoundland, 1762–1767* from which the information in this work is largely taken.

Although Cook had noted on a 1764 chart that Codroy and Port aux Basques both had "English fisheries of late years", and that Codroy was "well suited for [the] salmon fishery", the first indication of an occasional pioneer settler on the west coast comes from his 1767 survey of the Bay of Islands when, in September of that year, he:

"led a five-day boat expedition up the Humber River from Bay of Islands. He went four miles up Deer Lake 'but could see no land at the N.E. end, the weather then being very clear'. However, he learned from winter residents that the lake was about twenty-five miles long. He . . . comments: 'In this river has formerly been a very great salmon fishery and the Bay of Islands has been much frequented by fishers'."[149]

The statement that he received information from winter residents is of particular interest. These were probably English who had moved into the area after 1756; though the French sometimes encouraged a few English to look after their property over winter. And geologist, J.B. Jukes, who visited "Humber Sound" in 1839, reported that, "We anchored at the Head of the Sound and . . . found here an old

man . . . with his family . . . He had lived in this spot for sixty years."[150] This would put them on the Humber about a decade after Cook's visit. In 1787, only 20 years after Cook was there, an Englishman is reported to have shipped 76 tierces of salmon from the Humber River to St. John's.[151] By then, the Treaty of Versailles (1783) had extended France's west coast boundary southward to Cape Ray and France had forcibly removed some English settlers from that coast. As late as 1808, there were still only 36 settlers in Humber Sound, increasing to just 86 three decades later.[152]

Cook also said in 1767 that, "In this river [Humber] has formerly been a very great salmon fishery . . .." Since the French had dominated the west coast fishery prior to the outbreak of the Seven Years War in 1756, the reference is most likely to their activity. His comment conjures up visions of a large French salmon fishery on Humber River salmon stocks during the first half of the eighteenth century or even earlier, but the actual record remains blank.

Americans also participated in the west coast salmon fishery after the Seven Years War, and John Brown wrote to Newfoundland's Governor Shuldham in 1774 saying that he had carried on a fishery at "Cod Roy" and Humber River for 7 years, but had been annoyed by American fishing vessels, "and particularly by one Lawrence Cavanagh, who had brought parties of Cape Breton Indians for the purpose of furring, all contrary to law."[153] Indeed, New England traders and fishermen were competitors of Nova Scotians for the produce, including salmon, of Newfoundland's west coast in these years.[154]

If at least a few settlers were exploiting Humber River salmon following the end of the Seven Years War, others were doing likewise in the Bay St. George and Codroy areas, and:

"by at least the 1770's a handful of British fishermen began to winter in St. George's Bay, basing their economy primarily on winter trapping and the summer salmon fishery. . . . only a few remained permanently in the bay".[155]

W. E. Cormack, having just completed the first traverse of Newfoundland's interior in late 1822, reported a Mrs. Hulan living at Second Barasway, St. George's Bay, who, ". . . had lived in St. George's Bay for upwards of sixty years, and remembered the celebrated navigator Captain Cook, when he surveyed the coast."[156] Cook's survey was in 1767, the same year that he did the Bay of Islands.

As indicated, French fishermen returned to the Treaty Shore after 1763, but by 1778 England and France were again at logger-heads, France having joined the American Revolutionary War then in progress. Again French ships disappeared for the duration. However, the Treaty of Versailles restored France's rights in Newfoundland to their pre-war status. In addition, the area to which they applied was extended southward from Point Riche to Cape Ray. France endeavoured to ensure an exclusive fishery there by forcibly removing English settlers, which may have caused the abandonment of the English salmon fishery on the Humber River in 1788, two English salmon posts in St. George's Bay having been destroyed in 1786.[157] A British Act passed in 1788 gave the Newfoundland governor authority to prevent British fishermen from visiting the French area and forbade the French from salmon fishing beyond one-half mile up from river mouths.[158] It had little effect, the French still being active in the area more than a hundred years later.

When the French Revolutionary and Napoleonic wars began in 1793, French ships again vacated the Newfoundland fishery. Once more, at war's end in 1815, they returned to Newfoundland. By then, however, the settlement picture on the west coast had changed radically, and:

"a number of settlers had ensconsed themselves within the former French limits,so that when the French resumed their fishery in 1815 a new system had arisen, entirely at variance with the declaration of 1783."[159]

During the French absence, British salmon fisheries had developed in the Bay of Islands, Bonne Bay, and Bay St. George; and in 1808 they exported almost 800 tierces of salmon, more than half from St. George's Bay alone. However, in 1811 they produced less than half that of three years earlier.[160]

One of the British navy ships assigned to the Newfoundland station in 1813 was H.M.S. *Rosomonde*, which arrived in St. George's Bay on June 23rd of that year. On board was Lieutenant Edward Chappell, who later published an account of his Newfoundland experience under the title *Voyage of His Majesty's Ship Rosomonde to Newfoundland and the Southern Coast of Labrador*. He reported that the settlers were alarmed when his ship first appeared, fearing it to be American, the war of 1812 then being in full swing. However, this difficulty was soon overcome and they were welcomed by a man who procured a livelihood by catching and curing salmon.[161]

According to Chappell, there were then 209 "souls" in St. George's Bay, made up of about 112 English plus a few French, the rest being Micmac Indian. By that time, at least one generation of Europeans had grown to adulthood in that area and exploited local salmon stocks from the outset. On the day following their arrival, Chappell and some fellow officers went fishing at a small river near the entrance to Flat Bay (probably what is now Little Barachois Brook) and returned on board with 25 dozen of large trout, taken in the course of 6 hours fishing.[162]

From Chappell's observations it appears that all of the best harbours from Bonne Bay southwards, most of which had one or more salmon rivers, had a few permanent settlers by 1813. Bonne Bay itself had 30 and, though he does not mention Humber Arm, there also were a few at that place. The situation to the north of Bonne Bay was quite different, the French ship fishery still being dominant there at that time.

Nine years after Chappell's visit, William Epps Cormack, having completed the first recorded crossing of the main body of the Island of Newfoundland, reached the western terminus of his journey at St. Georges Harbour. There were then about 100 settlers at that place who took 300–400 barrels of salmon each year. This was sold at either Halifax or St. John's, much of the west coast trade in these days being with Nova Scotia.

Some twenty-odd miles south of St. Georges Harbour were the estuaries of Robinsons, Barachois and Crabbes rivers, known collectively as "The Barasways", where seven or eight families took about 150–200 barrels of salmon each year.[163] A bit further south again, at the "Cod Roys", another 50 barrels of salmon were taken, the combined catch for all areas being about 500–650 barrels per annum (about 115 000–160 000 lb, round weight). This was taken by 30 salmon fishing crews, having an estimated total of about 75 fishermen between them.[164] There is no mention of French participation in the salmon fishery, though it seems likely that they took some, if only to augment their food supply. Some may also have been taken by migrant Nova Scotian or New England fishermen.

If Cormack's reported catch in 1822 is compared with that for the same area — corresponding to the present Area "K" — during the years 1971 to 1975 it appears that much greater effort (142 commercial fishermen plus hundreds of anglers) was required in the later years to take a smaller total catch of about 100 000 lb, round weight. If, of course, additional unreported salmon were taken in the 1820's, as seems likely, the disparity would be even greater.

Following Cormack, there is a gap in the west coast record until 1835 when it was visited by the Reverend Edward Wix, who published the narrative *Six Months of a Newfoundland Missionary's Journal, from February to August, 1835*. It is obvious from Rev. Wix's story that there had been a considerable population increase in areas south of Bonne Bay, including in Humber Arm. Of the salmon fishery he said only that all the people in Bay St. George prosecuted it, being generally very lucrative.[165] He also provided a vivid description of trout spearing by torchlight, a fishing method used in Bay St. George at the time:

"Monday, 6. [July, 1835] — Went this week to visit the salmon fisheries . . . upon the main gut . . . One night, as some of the people and an Indian boy were going out at the rise of high tide, five canoes in all, to spear trout and eels, I joined them in the excursion . . . The scene was an animating one. A brilliant moon hung over the hills, which were finely wooded, to the very cliffs and sand at the edge of the water. Bunches of birch bark were . . . stuck one at a time, as required, into a stick which was cleft at the top to let in this rude flambeau, to which a light was applied. It . . . was then put upright in the bow of the canoe, there, also the man stood . . . with his *nighook*, or eel-spear, a pole cleft at the bottom with a spike inserted. This, on his striking a fish of any size, would open and admit it till the spike perforated it, and then closing upon it, would press it and prevent its escape . . . The fish seemed at least bewildered, if not attracted by the light; and the quickness of eye, and adroitness of the man who used the nighook . . . were surprising. . . . Four hundred trout were thus speared in the canoe in which I was . . . I had the curiosity to weigh six of them, which together weighed twenty-two pounds, and had a barrel . . . salted that I might taken them with me to St. John's."[166]

More than 1000 settlers were reported living in the St. Georges Bay area in 1841.[167] They produced about 300 barrels of salmon each year, sold mostly to Halifax. This was down considerably, notwithstanding the population increase, from the 500–650 barrels reported by Cormack in 1822. However, it may not have represented the total catch, since some salmon also usually went to St. John's and elsewhere.[168]

Some 200 barrels of salmon were reported taken in St. Georges Bay in 1848 and about 280 barrels in 1851, all of which went to Halifax.[169, 170] However, the resident magistrate at St. George's from 1850 to 1853, testified in 1856 that he "cleared" 670 barrels for export in 1851. Another individual said that salmon catches had by then been reduced to "one-third of the usual and ordinary catch" of former years.[171]

Although Representative Government came to Newfoundland in 1832, and Responsible Government in 1854, there was little effective local administration on the west coast throughout the nineteenth century. The first move to rectify this was made in 1843, when senior officers of the Fishery Protection Patrol were appointed Justices of the Peace for the Colony, enabling them to enforce law on the settlers of the Treaty Shore. The next step was the appointment of a resident magistrate at St. Georges Bay in 1849, a post annulled in 1853 because, "St. Georges Bay contributes no duties to the Revenue of this colony."[172] It was 25 years before a successor was appointed. In the interim, the coast was without administrative representation from the colony, a situation which did not promote keeping accurate records on salmon or anything else.

There is even less information on the pre-1850 salmon fishery of the Bay of Islands and Bonne Bay areas than for areas south of there, at least partly due to French efforts to ensure an exclusive fishery there after 1783. There were still only five settler's families at Bonne Bay in 1838, but these few did not have the fishery to themselves.[173] During that half-century, English trading firms brought out personnel each season to prosecute the fisheries, some of whom stayed on to help form settlements. Few records of their salmon production exist, though one English firm in the Bonne Bay area took about 160 tierces annually in the early 1820's, but less than half that in the 1840's. Throughout that period, these entrepreneurs competed with traders and fishermen from Nova Scotia, and perhaps also from New England.[174]

Except for the scanty figures quoted, the record is blank until 1862, when "four or five" English families were reported to winter "up the Humber".[175] The first sawmill is said to have been set up at Corner Brook in 1865.[176]

One hundred and fifty barrels of salmon were exported from the Humber River in 1868. By 1874, two sawmills were operating at Corner Brook and there were about 300 families in the Bay of Islands, together with 30 families at Deer Lake.[177] There were also 700 residents at St. Georges Harbour, with "Dams, weirs and nets . . . set right across the rivers."[178]

By the early 1870's concern about salmon stocks was being expressed by members of the Naval Fisheries Patrol, Commander Knowles saying:

"the salmon fishery on this coast, both in the rivers and

in the bays and creeks of the island, . . . is . . . very surely, becoming exterminated. In the bays, fleets of nets are frequently laid down, sometimes 20, 40 and 50 at a time, and every inlet stopped; and . . . the rivers are so obstructed by weirs, traps, dams and nets, . . . that is a wonder that the fishery has not long since come to an end."[179]

Knowles' successor, Commander Howorth, commenting on "Ponds River" (River of Ponds) in 1874, said:

"My object . . . was to ascertain if the French weir remained, as I had been . . . told that the owner had left. I found that . . . the weir was still there; the river was also completely barred by two salmon nets . . . I ordered the nets to be taken up and reset according to law, though I felt it could make no manner of difference how nets were set, when the weir was allowed to remain."[180]

Howorth reported very few salmon taken at River of Ponds in 1874, but said that 500 had been killed above the weir in 1873. He also said that the two salmon rivers in Hawkes Bay (Torrent and East rivers) were being fished but made no mention of French participation in the Bay of Islands salmon fishery or south of there.

At about the same time, a letter to the Governor from the Director of the Geological Survey, Alexander Murray, reported, "a great saw mill is in active operation near the mouth of Humber River . . . in utter defiance of law or authority . . .." About the patriarchal system of ownership existing at or near the mouths of some salmon rivers in that area, he said:

"A worse feature still . . . presents itself at the mouths of the principal streams all round the island, but notably in St. Georges Bay and others parts of the French shore. At each of these places small communities are formed, varying in numbers from fifty to two hundred individuals, who assume to possess an exclusive right . . . to the whole vallies [*sic*] of their respective rivers; and moreover they even further claim absolute right to the river itself . . . [including] the supposed *prescriptive right of salmon poaching* . . .."

Murray also denounced other abuses perpetrated on French Shore salmon rivers, saying:

"In conclusion, let me add a few words upon the wholesale destruction of salmon and trout, which is perpetrated on every river and brook in the island, but more particularly upon . . . the French shore. Barring up the streams, building weirs, sweeping the pools with seine nets, and night spearing, are practices everywhere; . . . What the result of all this indiscriminate slaughter will be eventually, is not difficult to prophesy. . . . many rivers which formerly produced hundreds of tierces of salmon and trout annually, are now almost or quite destitute of either . . .."[181]

Settlement was still quite sparse in northern areas, Port au Choix being mainly a summer station for the transient French cod fishery. There was the occasional English resident fishing the salmon rivers in Hawkes Bay, but no settlers at Torrent River; and few, if any, at Port Saunders. A small salmon river in St. Barbe Bay (West River) was being fished by a man named Genge.[182] Captain W. R. Kennedy said of the Hawkes Bay rivers in 1880, that:

"Two fine salmon rivers in Hawkes Bay are nearly exhausted by years of abuse, barring, sweeping with nets, etc., till from yielding eighty barrels of salmon in a season, they now produce only one and a half."[183]

About the Codroy River in the same year, he said:

"The Codroy was once famous for salmon; but many years of wholesale netting has nearly exhausted it, and the yield is barely sufficient for the people residing on the banks. The main channel is narrow, and is so thoroughly barred by stake and trap nets ingeniously set, that few fish can pass to the spawning beds above . . .."[184]

Some idea of the change in salmon status of some rivers over the past one hundred years or so, can be gleaned from Kennedy's reference to Grand Bay Brook, near Port aux Basques, which he said was, "a beautiful salmon river . . . famous for salmon and trout of enormous size." Though it still gives up a few salmon and sea trout each year, it certainly does not now receive that sort of accolade. It is the same river that one of Kennedy's predecessors had reported as being barred by nets in 1874.

As the numbers of settlers increased in the "French Shore" areas, French–English disputes became more acrimonious. Both, of course, abused the rivers, but Kennedy and his fellow officers could enforce protective regulations on the settlers, but were powerless against the French.[185] When Captain Howorth was appointed magistrate at St. Georges Bay in 1877, the colonial government again began to exercise its authority on the west coast.[186] A second step was the appointment of a Customs Officer at St. Georges Bay in 1878, and the third the election of members for the electoral districts of St. Georges and St. Barbe in 1882.

Prior to these appointments, much of the settler's salmon catch on the west coast was not included in annual export figures of the colony, having gone directly to Nova Scotia, New England, or the British Isles, without benefit of official blessing. In addition, fishermen from Nova Scotia who fished on the west coast took their catches back home with them. There was also no record of the French catch which, though apparently restricted to a few river weirs by the second half of the nineteenth century, could have been substantial.

As a result of recommendations by the Newfoundland Fisheries Commission, two river wardens were appointed on the west coast in 1891, one each to the Bay St. George and Codroy areas.[187] Thus, the west coast was gradually being integrated with the rest of the colony, a process which was boosted by the beginning of trans-insular train service from St. John's to Port aux Basques in 1898. By 1904, 22 wardens had been appointed in the St. George's and St. Barbe districts alone, their rate of pay ranging from $35 to $65 per year.[188] Even in these days, when wants were few, such recompense seems unlikely to have roused its recipients to enthusiastic job performance.

With the signing of the British–French Convention of 1904, problems of French participation in the west coast salmon fishery largely disappeared. By Article 1 of that Convention, France relinquished her landing rights on the Treaty Shore. Article 2 spelled out those remaining that had to do with the salmon fishery as follows:

"The French . . . will remain subject to the local regulations in force; they may also fish at the mouth of rivers, but without going beyond a straight line drawn between the two extremities of the banks, where the river enters the sea.

"They shall not make use of stake-nets or fixed engines without permission of the local authorities."[189]

Although France retained the right to fish for salmon in the tidal waters of the Treaty Shore, subject to local regulations, it was little exercised after that time.

The advent of the railway also made west coast rivers more accessible to anglers, the 1904 annual report noting that Torrent, East River, and Genevieve Brook were the best for sport north of Bonne Bay.[190] That for 1906 said that salmon were abundant in Bay St. George rivers that year, with many from 22–25 lb being caught. Notwithstanding a poor marine salmon fishery in 1906, a "large quantity" was reported sent to St. John's.[191]

In summary, the early record of the west coast salmon fishery is incomplete. Indeed, until at least the 1870's, there is little record even of the fishery by settlers, much of their catch not appearing in the records of the colony. After that time, the situation improved somewhat. However, until a system of statistics collection was begun in 1950, it is only rarely that the west coast salmon catch can be separated from the rest of what is now the Province of Newfoundland and Labrador.

The South Coast Region

This region extends along the south coast of the island from Cape Pine in the east to Cape Ray in the west. In comparison with other regions, data on salmon exploitation are relatively sparse during the eighteenth and early nineteenth centuries. This is because English settlers were relatively slow to move into the area and settlements were separated by long stretches of coastline. In addition, good salmon rivers were few and far between.

During the second half of the seventeenth century, France greatly expanded its ship fishery on Newfoundland's south coast and in 1662 built a fort at Placentia to support it. French settlers were soon established and by 1701 there were 200 at Placentia, 186 at St. Pierre and Miquelon, 150 in Fortune Bay and seven at St. Mary's; all of whom, it may be assumed, fished for salmon in nearby rivers and brooks.[192] That fishery, therefore, may be dated as beginning in the late 1600's or early 1700's, though both English and French fishing ships had frequented the area for about a century prior to that time.

In 1714, the year after the signing of the Treaty of Utrecht, the south coast was surveyed by Captain William Taverner for the English. Taverner was informed of an abundance of salmon on that coast and, although there were still French inhabitants at Grand Bank and Fortune, it was probably about that time that salmon became a commercial commodity there for the English.[193] In this respect, a British Governor at Placentia in the 1720's was reported as having one "salmonry" for himself and another which he "rented out."[194] Also about this time, a commercial salmon fishery began operating in Trepassey and St. Mary's bays where:

"John Masters . . . and one Philip Watson established . . . a fishery on the Great Salmonier River and on the Colinet River . . . of St. Mary's Bay and on the Biscay Bay River just east of Trepassey. The first notice of this endeavour came in 1723, and by the next year they were paying out wages of 300 pounds to 16 men for its operations. Whenever reports are available, they suggest that this fishery . . . continued, but expanded little if at all."[195]

The English were slow to fully utilize south coast areas west of the Avalon and when Captain Cook surveyed the area in 1765 there were still only about 600 residents in Fortune Bay and westwards, mostly in the Grand Bank–Fortune area. He reported, "a very fine salmon fishery" at Long Harbour River in Fortune Bay. By that time English commercial firms had arrived, one such being Clarke and Young of Poole, England, which had buildings at Harbour Breton in 1765. However, there were only a few over-wintering inhabitants, as was also the case at Bande de la Rier, now known as Belleoram.[196]

When the American Revolutionary War broke out in 1775, British fishing effort was considerably diminished and there was a brief respite for local salmon populations. After the war ended (1783) English immigration began to pick up, especially west of the Burin Peninsula. Even so, Fortune Bay supported only about 1000 persons as late as 1790.[197] Except for the long-established fisheries at St. Mary's and Placentia bays, and that which Cook had reported at Long Harbour, there is little reference to salmon in the surviving documents. This is true even of such an excellent salmon river as the Conne River in Bay D'Espoir, though there were French settlers at nearby Hermitage before 1714, and both English and French periodically frequented that area throughout the eighteenth century.[198] This continued into the nineteenth century, though a Church of England missionary made brief reference to Salmonier River (St. Mary's Bay) and to "great quantities of salmon" at Placentia in 1817–1818. He also mentioned Long Harbour and Bay du Nord salmon rivers in Fortune Bay, but gave no other detail.[199]

Six tierces of salmon were taken by nets from Come By Chance River in 1838, and to the value of 20–30 pounds from North Harbour River in 1840.[200] By 1842, the salmon fishery had extended all along the south coast, the Newman Company having an extensive establishment at Harbour Breton.[201] The Newfoundland House of Assembly Journal began to carry occasional reports on south coast salmon in 1851, that for 1852 noting that most of it was sold to Nova Scotian traders.

The first indication that Newfoundland fishermen might be exploiting other than local salmon stocks — though this

was unknown at the time — is recorded in the testimony of the Burin Magistrate before a Select Committee of the House in 1856. He reported on a so-called "headland salmon fishery" which had started in his area some 10–12 years previously. It began, he said, about mid-May of each year, used only large-meshed nets of 6–7 inches, and caught only salmon of 10–12 lb each.[202] This was in contrast to the regular fishery which began around mid-June, used 4- to 5-inch mesh, was confined to areas near river mouths, and took mostly salmon of 5 pounds or less. Thus, around 1845, salmon from the rivers of mainland Canada began to be taken in fishing gear set on Newfoundland's south coast.

The Assembly Journal for 1866 provided a summary of south coast salmon exports for the years 1859 to 1864.[203] They are reproduced in Table 2.1, together with those for 1850 (from the Journal for 1851).

Table 2.1 includes most of the South Coast Region corresponding to present day Statistical Areas "H" (Placentia Bay), "I" (Fortune Bay), and "J" (Pass Island to Port Aux Basques), the combined totals (excluding 1850) being compared below with those for the same area during 1960–65. Bear in mind that, in the earlier years, as much as 50% of the catch may have been sold to Nova Scotian traders and are not included. The comparative data are:

Period	Catch range	Average catch
	(lb)	(lb)
1859–1864	197 000–315 000	285 000
1960–1965	186 000–452 000	304 000

Given the minimal nature of the 1859 to 1864 record, and annual variations in salmon abundance and availability, about the only thing that can be said about these oversimplified statistics is that they are surprisingly similar.

The first wardens were appointed on the south coast in 1871, one each at St. Mary's Bay, Fortune Bay, and in the area between Connaigre Head and Cape LaHune (west of Fortune Bay). The system was apparently abandoned in the mid-1870's and no further appointments made until some time after 1891. By 1904, however, there were at least 20 wardens between Trepassey and LaPoile but their duties had little to do with salmon.[205]

During the early 1870's the warden's annual reports provided fairly detailed information on such things as numbers of nets and their catch. There was also frequent reference to "barring" rivers, Grandys and Conne rivers being apparent favourites in this respect. An interesting item in 1873 advised that the Conne River salmon fishery, then operated by a Mr. Collier, had been given to Samuel and John Clark in the eighteenth century by a naval captain. They, in turn, had sold it to the famous Newman and Company in 1822.[206] The Assembly Journal for 1879 recorded a petition to establish, "breeding houses for salmon culture" in Placentia, Colinet, and Salmonier rivers, in all of which exclusive fishery rights were requested for 10 years. In return, the petitioners would supply 500 000 salmon fry annually to the government.[207] No further reference to this proposed activity was found and it is presumed that the petition was not favourably received.

The annual report for 1904 records that a "fishway" was constructed on Rocky River in St. Mary's Bay. Though few construction details are given, it was probably mostly in the nature of blasting in the falls area. Neither this activity in 1904, nor that many years later when more elaborate work was done at the same site, appears to have served much useful purpose.[208]

No information was located during the course of this study that would indicate any activity in a drift-net fishery in the Port Aux Basques area during the years reviewed, that fishery having had its local origins in experiments conducted by Port Aux Basques fishermen, using ordinary gill nets, in 1925. However, its practical beginning was in 1931 when proper gear was first obtained. The fishery did not reach appreciable significance until 1935.[209]

TABLE 2.1. South coast salmon exports (tierces), 1859–64.

Port	1850	1859	1860	1861	1862	1863	1864
Placentia		26	—	1	9	2	—
Little Placentia		13	15	14	8	5	—
La Manche		2	—	—	—	6	—
Oderin		—	27	—	—	—	—
Burin	200	124	295	110	17	120	68
St. Lawrence		—	2	—	—	—	—
Lamaline		—	—	—	—	—	30
Hr. Breton	197.5	189	80	177	33	43	42
Bay du Nord		—	—	—	—	5	—
Gaultois		—	—	—	31	20	—
Burgeo		33	80	76	98	243	332
LaPoile		478	377	323	178	134	179
Port Aux Basques		—	—	152	173	209	176
Total tierces:		865	876	853	547	787	827
Total round weight (1 tierce = 360 lb):		311 000	315 000	308 000	197 000	283 000	298 000

Footnotes

1 Hakluyt Society 1940, 2: 406.
2 *Ibid.*: 385–423.
3 Quoted in Prowse 1895: 106.
4 *Ibid.*: 136.
5 Whitbourne 1620: 10.
6 Poynter 1963: 55.
7 See discussion on conversion factors.
8 Reeves 1793: 25; Lounsbury 1934: 338–339.
9 Head 1976: 75.
10 *Ibid.*: 60.
11 Prowse, *op. cit.*: 279.
12 The "Straight Shore" is that area of the northeast coast of the island extending from about Ragged Harbour in the west to Cape Freels in the east. It has few harbours but several good small salmon rivers.
13 Head, *op. cit.*: 75.
14 Rogers 1911: 99.
15 Head, *op. cit.*: 75.
16 Head, *op. cit.*: 75.
17 *Op cit.*: 62.
18 Prowse, *op. cit.*: 283.
19 Rogers, *op. cit.*: 122.
20 Head, *op. cit.*: 76.
21 Howley 1915: 27.
22 *Op cit.*: 122.
23 Head, *op. cit.*: 76.
24 Prowse, *op. cit.*: 185
25 Head, *op. cit.*: 175–176
26 Quoted in Howley, *op. cit.*: 267.
27 Jukes 1842, II: 103.
28 Macpherson 1977: 117.
29 J.N.H.A. 1857: 342.
30 J.N.H.A. 1873: 810.
31 J.N.H.A. 1874: 854–855.
32 J.N.H.A. 1875: 1221.
33 J.N.H.A. 1876: 492.
34 J.N.H.A. 1884: 756.
35 Ann. Rep. Nfld. Fish. Comm. for 1892: 16.
36 Prowse, *op. cit.*: 620.
37 Ann. Rep. Nfld. Dep. Fish. for 1904: 27–28.
38 Innis 1940: 294.
39 Jukes, *op. cit.*: 92.
40 J.N.H.A. 1873: 816.
41 *Ibid.*
42 J.N.H.A. 1875: 854–855.
43 *Ibid.*: 852–853.
44 Murray and Howley 1881: 429.
45 J.N.H.A. 1887: 886.
46 Kennedy 1885: 49–50.
47 *Op. cit.*: 621.
48 Head, *op. cit.*: 75
49 J.N.H.A. 1873: 814–815.
50 J.N.H.A. 1876: 486, 491.
51 Reeves, *op. cit.*: 62.
52 Innis, *op. cit.*: 294.
53 Rogers, *op. cit.*: 122.
54 *Ibid.*
55 Head, *op. cit.*: 75.
56 Rogers, *op. cit.*: 122.
57 Innis, *op. cit.*: 294.
58 *Ibid.*
59 Bonnycastle 1842: 268.
60 Jukes, *op. cit.*: 157.
61 J.N.H.A. 1856: 159. This appears to be the source of the oft-quoted statement that the Gander River used to produce 1000 tierces of salmon annually (e.g.: see Netboy 1968: 354).
62 *Ibid.*: 161–162.
63 J.N.H.A. 1860: 485.
64 J.N.H.A. 1872: 718.
65 Murray 1875.
66 Erskine 1875: 43.
67 *Ibid.*: 13.
68 *Ibid.*: 21.
69 J.N.H.A. 1876: 390.
70 Kennedy 1885: 53.
71 Ann. Rep. Nfld. Fish. Comm. 1899: 20, 25.
72 J.N.H.A. 1885: 425–430.
73 J.N.H.A. 1884: 751–760.
74 Ann. Rep. Nfld. Fish. Comm. 1889: 18–21.
75 *Ibid.*
76 *Ibid.*: 25.
77 Prowse, *op. cit.*: 620.
78 Ann. Rep. Nfld. Fish. Comm. 1892: 9, 16.
79 *Ibid.*: 8–9.
80 *Ibid.*: 16
81 Ann. Rep. Nfld. Dep. Fish. 1902: 23.
82 *Ibid.*
83 Prowse 1911: 94–95.
84 Reeves, *op. cit.*: 62.
85 J.N.H.A. 1872: 717.
86 J.N.H.A. 1884: 755.
87 Ann. Rep. Nfld. Fish. Comm. 1889: 21–22.
88 Porter et al. 1974: 254.
89 *Ibid.*: 243.
90 Wilson 1866, quoted in Howley, *op. cit.*: 267–268.
91 *Op. cit.*: 294.
92 J.N.H.A. 1873: 806.
93 Anspach 1827: 317.
94 *Op. cit.* (1895): 283.
95 *Op. cit.*: 27.
96 *Ibid.*: 41.
97 *Ibid.*: 36.
98 *Ibid.*: 49.
99 Head, *op. cit.*: 76.
100 Quoted in Howley, *op. cit.*: 56.
101 Quoted in Innis, *op. cit.*: 294.
102 *Op. cit.*: 72.
103 *Ibid.*: 92.
104 Quoted in Howley: 295–297.
105 J.N.H.A. 1856: 162.
106 J.N.H.A. 1872: 716–719.
107 J.N.H.A. 1873: 804–808.
108 *Ibid.*: 818–819.
109 J.N.H.A. 1874: 857.
110 J.N.H.A. 1875: 834–835.
111 J.N.H.A. 1875: 1207.
112 *Ibid.*: 1209–1212.
113 Murray 1875.
114 Kennedy 1881: 76–79.
115 *Ibid.*: 79–80.
116 Hatton and Harvey 1883: 267.
117 J.N.H.A. 1834: 755–756.
118 Ann. Rep. Nfld. Fish. Comm. 1889: 22.
119 Ann. Rep. Nfld. Fish. Comm. 1892: 9.
120 Ann. Rep. Nfld. Dep. Fish. 1902: 24.
121 J.N.H.A. 1905: 164–165.
122 J.N.H.A. 1906: 159.
123 *Op. cit.*: 282.
124 *Op. cit.*: 294.
125 J.N.H.A. 1856: 158–160.
126 J.N.H.A. 1872: 716.
127 J.N.H.A. 1873: 819–820.
128 J.N.H.A. 1875: 828–829.
129 *Ibid.*: 1209–1212.
130 *Ibid.*: 1227–1228.

131 Erskine, *op. cit.*: 45–46.
132 *Op. cit.*: 83.
133 J.N.H.A. 1884: 755.
134 J.N.H.A. 1886: 712.
135 *Op. cit.*: 97.
136 *Op. cit.*: 215.
137 Howley, *op. cit.*: 118–119, 280–281.
138 J.N.H.A. 1873: 807–808.
139 Innis, *op. cit.*: 215.
140 J.N.H.A. 1856: 162.
141 Murray 1875.
142 J.N.H.A. 1873: 725.
143 J.N.H.A. 1874: 793–795
144 Howorth 1874: 18–19.
145 *Op. cit.* (1885): 7–9.
146 Thompson 1961: 9.
147 *Ibid.*: 8.
148 MacNutt 1965: 24.
149 Whiteley 1975: 19.
150 *Op. cit.*: 100.
151 Innis, *op. cit.*: 215.
152 Mannion 1977a: 237.
153 Gosling 1910: 328.
154 Mannion, *op. cit.*: 259.
155 Mannion, *ibid.*: 243–244.
156 Quoted in Howley, *op. cit.*: 162.
157 Mannion, *op. cit.*: 244.
158 Thompson, *op. cit.*: 19–20.
159 *Ibid.*: 22.
160 Mannion, *op. cit.*: 244–245.
161 Chappell 1818: 65.
162 *Ibid.*: 68–69.
163 Howley, *op. cit.*: 130–168.
164 *Ibid.*: 160.
165 Wix 1836: 189.
166 *Ibid.*: 216–218.
167 Quoted in Innis, *op. cit.*: 405.
168 See Mannion, *op. cit.*: 257–261.
169 J.N.H.A. 1849: 422.
170 J.N.H.A. 1852: 107–114.
171 J.N.H.A. 1857: 300–302.
172 Thompson, *op. cit.*: 38.
173 Mannion, *op. cit.*: 237.
174 *Ibid.*: 257–259.
175 J.N.H.A. 1863: 402.
176 Mannion, *op. cit.*: 253.
177 J.N.H.A. 1875: 751.
178 J.N.H.A. 1872: 636.
179 J.N.H.A. 1873: 725.
180 Howorth, *op. cit.*: 5, 13–14.
181 Murray 1874.
182 Erskine, *op. cit.*: 11.
183 Kennedy 1885: 63.
184 *Ibid.*: 106.
185 *Ibid.*: 7–9.
186 Thompson, *op. cit.*: 45.
187 Ann. Rep. Nfld. Fish. Comm. 1891: 34.
188 Ann. Rep. Nfld. Dep. Mar. & Fish. 1907: 93.
189 See Thompson, *op. cit.*: App. 6.
190 Ann. Rept. Nfld. Dep. Fish. 1904: 51.
191 Ann. Rept. Nfld. Dep. Fish. 1906.
192 Innis, *op. cit.*: 121–123.
193 C.O. 194/5, f257, 260.
194 Head, *op. cit.*: 60.
195 *Ibid.*: 76.
196 *Ibid.*: 159–162; Whiteley, *op. cit.*: 20–21.
197 Pilot 1895: 22.
198 C.O. 194/5, f260.
199 Anspach, *op. cit.*: 309–312.
200 Jukes, *op. cit.*: I: 76–77, II: 30–33.
201 Bonnycastle, *op. cit.*: 244–245.
202 J.N.H.A. 1857: 347–348.
203 J.N.H.A. 1866: 664–665.
204 J.N.H.A. 1851: 142.
205 Ann. Rep. Nfld. Dep. Fish. 1904: 37–39.
206 J.N.H.A. 1874: 850.
207 J.N.H.A. 1879: 65–66.
208 Ann. Rep. Nfld. Dep. Fish. 1904: 37–39.
209 Belding and Prefontaine 1938: 7, 12.

FIG. 3.1. Most rivers and other places of Labrador mentioned in the text.

CHAPTER 3

Early Development of the Salmon Fishery of Labrador

This fishery has been vigorously prosecuted for centuries along the coast, from Bonne Esperance to Hamilton Inlet. It is carried on at the mouth of the larger rivers and in the inlets; but it is also doomed to extinction in the near future, owing to the recklessness displayed by fishermen who contravene the fishing regulations.

BROWNE 1909[1]

In this discussion, the name Labrador refers to that part of northeastern North America awarded to Newfoundland by the Imperial Privy Council decision of 1927. It once applied to a much larger area, one that extended several hundred miles westward on the north shore of the Gulf of St. Lawrence and included Anticosti and Magdalen islands.[2]

Vikings from Greenland probably visited the Labrador coast during the tenth and eleventh centuries and may have been the first non-indigenous people to sample its salmon. Their visits, if such there were, ceased during the eleventh century. Some 500–600 years elapsed before the next Europeans arrived around the middle of the sixteenth century. These were Basque fishermen, predominately Spanish, who began whaling in the Strait of Belle Isle (Fig. 3.1) around 1540 and continued until about 1620. Each year several thousands of them were on the Labrador shore from early summer to December, or even January.[3] During these years, they doubtless exploited salmon rivers in the vicinity of their anchorages and shore stations as a source of food.

After the Basque fishery ended, some decades elapsed before the next Europeans came on the scene. However, in 1702, the Governor of New France granted one Sieur de Courtemanche a 10-year concession in what was apparently the Hamilton Inlet area.[4,5] And, in 1743, Louis Fornel claimed that he had explored Hamilton Inlet, as well as having discovered Chateau Bay even earlier.[6,7] He also referred to a post at Cape Charles owned by Sieur Marsal, the remains of which were re-discovered by George Cartwright in 1770.[8] There were probably other French fishing and furring stations in the same area until the Treaty of Paris in 1763, following which Labrador was attached to the Newfoundland jurisdiction.

In 1764, the newly appointed Newfoundland Governor, Sir Hugh Palliser, took steps to encourage British ships to continue the former French fishery in southern Labrador, as well as to explore resources to the north. One of the first to take advantage of this was Jeremiah Coughlan of Fogo, who claimed to have set up at Chateau in 1765.[9] Captain Nicholas Darby was also in Labrador in 1765, with 150 men. He was back the following year with even more men, some of whom stayed over winter. However, in 1767, the Esquimaux (as the Inuit were then known) destroyed his Cape Charles post and murdered three of his men and the post was abandoned. It remained vacant until George Cartwright came on the scene in 1770.[10]

One of Governor Palliser's first acts to encourage exploitation was the construction, in 1766, of Fort York at Pitts Harbour in Chateau Bay.[11] Immediately after the fort was built, the English firm of Noble and Pinson opened establishments at Temple Bay and L'Anse-au-Loup. Nicholas Darby, mentioned above, went to Charles Harbour and Seal Island, a few miles northwest of his former location at Cape Charles. Establishments were also founded at Blanc Sablon and Forteau by Channel Islanders, still others being located slightly to the westward in what would later become part of the Province of Quebec.[12] Most firms were interested in several fisheries, including salmon.

The most notable of the early traders and adventurers in Labrador was the aforementioned Captain George Cartwright, who succeeded Nicholas Darby at the Cape Charles establishment in 1770. He was in Labrador, off and on, for 16 years and, in 1793, published a detailed journal of his activities there entitled: *Journal of the Transactions and Events During A Residence of Nearly Sixteen Years on the Coast of Labrador; Containing Many Interesting Particulars Both of the Country and Its Inhabitants Not Hitherto Known*. An edited version was published in 1911 as *Captain Cartwright and his Labrador Journal*.[13] The information which follows relating to Cartwright's activity in Labrador, unless otherwise indicated, is from the latter source.

Three other "fisheries", in addition to that of the British, began in Labrador about the same time or a few years later. They were conducted by Newfoundland "Houses", by Newfoundland fishing and trading schooners, and by fishing and trading schooners from Nova Scotia and New England. Cod was their primary target, but all took some salmon as well.

The fishery by Newfoundland Houses had its origins in a movement of ships and men to the Labrador coast that began after the Treaty of Versailles, when France attempted to claim an exclusive fishery on the French Shore of insular Newfoundland and Newfoundlanders were encouraged to leave. Some who did leave established themselves on the Labrador coast to further their participation in its fisheries and in trading, including catching and buying salmon.

The large numbers of Newfoundland fishing schooners and traders that went to the Labrador coast each summer and returned to their home ports on the Island in the Fall were also mainly after cod, but some fished for salmon using gill nets and cod traps specially modified for salmon. Most of their salmon take returned to the Island of Newfoundland with them and became part of its export record rather than of Labrador's.

The newly invented cod trap came into use in Labrador during the 1860's and soon became an effective instrument

for taking salmon. Indeed, by the early twentieth century, cod traps were taking — not always by accident — as many salmon as gill nets. By that time, coastal gill nets were being set in such a way that they began to resemble traps in their configuration:

"these nets are fastened . . . to a 'shore-fast' and run straight off to sea . . . At the outer end, the line of nets, called a 'fleet' is held by "heavy anchors, and then a pound is formed by turning back with another net at an angle of forty-five degrees in the direction from which the salmon are expected to strike. At times yet another net is added, so that the triangular pound is closed, leaving merely a door. The salmon . . . seem, however, to get confused in the pound, and in this most are taken."[14]

Salmon fishing in Labrador's larger rivers and estuaries, such as those in Sandwich Bay, was largely by fixed gill nets from the outset. Similar gear was also used to "sweep" salmon out of pools in which they were holding up. Weirs were used in suitable smaller rivers, as at Cape Charles River by Cartwright in the 1770's. Gill net use in estuaries, and further seaward, was probably encouraged in the late 1700's by Nova Scotian and New England fishermen denied use of river locations by statutory proprietors such as Cartwright.

Many Nova Scotian and New England schooners also participated in the Labrador salmon fishery, especially before about 1850. In so doing, they occasionally interfered with the proprietary fisheries, as in Sandwich Bay in 1821 when a resultant court case was resolved in favour of the British proprietors. Others cruised the coast buying salmon where it could be found. All took their product back to their home ports with them at the end of the season and it seldom, if ever, became part of the official Labrador record. Crews of American fishing vessels were said to have numbered about 6,000 men in 1820. Even larger numbers of vessels were there in 1830, 300 being reported from Newfoundland, 120 from the Maritimes, six or seven from England and Jersey, and about 500 from America. Numbers of the latter, however, soon began to decline and all were gone by 1869.

The following descriptions of the early river fisheries proceed from south to north as far as Hamilton Inlet, which point is usually taken as the area beyond which substantial freshwater production of Atlantic salmon is superseded by that of Arctic char, *Salvelinus alpinus*.

Forteau River

The Basques probably fished Forteau River in the sixteenth and early seventeenth centuries, as did French fishermen and adventurers in the first half of the eighteenth. The earliest record of a salmon catch is for 1792 when 138 tierces were taken by four British ships in a fishery that started soon after 1763.[15] The settlement may have been established by French fishermen at a very early date, but its commercial importance dates from 1774 when a Jersey firm established a post there.[16, 17] Such firms usually had a shore establishment around which a nucleus of permanent settlers was attracted, so that Forteau River salmon have probably been continuously exploited since at least that time.

In 1813, Forteau was visited by the Fisheries Protection Patrol ship H.M.S. *Rosomonde*, one of her officers reporting it as the most extensive British settlement on that coast. The east shore, he said, was occupied by the English, who remained all winter, the west side by men from Guernsey who went home in the fall.[18] He also reported that at Forteau River, "Although it may seem incredible . . . in two hours the author caught twelve dozen trout, with "one and the same artificial fly."[19] In these days, the first English captain to arrive each spring had exclusive rights to the salmon river.[20]

The record is then blank until 1874, when the fishery was "remarkably good"; but, in 1875, salmon were again reported scarce.[21, 22] At that time, Forteau was embroiled in the "French Shore" controversy, both of its salmon rivers being, "claimed by the French but fished, and barred, by an old English poacher."[23]

Pinware River

An early sixteenth century French fishery in the Strait of Belle Isle may have extended to Pinware Bay and Basque whalers are known to have been in the area from about 1540 to 1620. Their port of Los Hornos may have been on the river estuary.[24, 25] After the Basques, Sieur de Courtemanche's concession of 1702 included the river, which in these days was known as the "River des Francis".[26]

When Labrador came under Newfoundland jurisdiction in 1763, the Pinware River salmon fishery became the property of English proprietors. The firm of Noble and Pinson may have been in possession as early as 1767 and was among the earliest.[27] The last owner of known record took it over around 1863, and in 1865 reported 43 tierces of salmon taken.[28] Twenty barrels were taken in 1871, but the usual was said to be 30–35 barrels.[29] One author, reporting in the early 1900's, said that the river was "teeming with salmon".[30]

In summary, Pinware River salmon populations, in common with others on that part of the Labrador coast, have probably been fished intermittently since the sixteenth century, and continuously since around 1770.

Temple Brook

This small salmon river flows into Temple Bay, an extension of Chateau Bay, at the northern end of the Strait of Belle Isle. Though probably never a big salmon producer, it may have had an attractive small run in its earliest days. It is noteworthy now mainly because of its historical associations. Both French and Basque fishermen frequented that area in the sixteenth and seventeenth centuries, and it was included in Courtemanche's 1702 concession, which referred to Temple Bay as the Harbour of St. Benoit[31]. French activity ceased in 1763 and Governor Palliser of Newfoundland began building a fort there in 1766. That same year, the famous naturalist Sir Joseph Banks visited the area and made reference to an "Old

Salmoneer at the top of Temple Bay."[32] The English firm of Noble and Pinson was established at Temple Bay in 1771.[33]

St. Charles River

The first indication of European activity in the St. Charles River area was the 1735 concession to Sieur Marsal of a post at Cape Charles, the site being visited in 1743 by Louis Fornel.[34, 35] It was probably Marsal that built the "old Canadian house" near the river mouth that Cartwright reported in 1770.[36] The Englishman Nicholas Darby, mentioned earlier, erected a salmon post on the river in 1767 but abandoned it that same year when three of his servants were murdered by natives.[37] It was re-occupied in 1770 by George Cartwright, who built his residence there.

Cartwright arrived at St. Charles River in late July, 1770, but had little time for fishing that year, his first salmon not being reported until 1771, when he was handicapped by a shortage of nets and salt. As it was, on July 24, he took 16 fish by net and 63 in "the pound", the latter doubtless being the trap area of a river weir. In June, 1772, he was dispossessed by the firm of Noble and Pinson which claimed the post by statutory right. As a result, he had to forego salmon fishing there that year, his main salmon effort being on the St. Lewis River, which he called the "Colleroon". To add to his problems, his St. Charles River post was destroyed by fire later that same year.

Cartwright returned to England in late 1772 to protest the seizure of his fishing post which, as a result, was returned to him in early 1773. In August of that year, he returned to Labrador, his people having taken more than 60 tierces of salmon, all presumably from the St. Charles and St. Lewis rivers. In late 1774 he sent men to overwinter at Sandwich Bay, which place would soon become the main focus of his Labrador interests. When Cartwright re-visited Charles Harbour in 1776, he recorded that three salmon posts in that area had got but 150 tierces. Presumably, these were at St. Charles, St. Lewis and Alexis rivers, all of which he used as late as 1779. Stocks from the St. Charles River play only a minor role in today's fishery.

Mary's Harbour River

This small salmon river enters the sea at Mary's Harbour, on the south side of the entrance to St. Lewis Inlet. As with other rivers in that vicinity, George Cartwright appears to have been the first European to exploit its salmon populations. He first saw it on May 29, 1771, when he wrote in his diary:

"We . . . then went into Mary [sic] Harbour . . . At the head of this place we found a very fine salmon river, which precipitates over a flat rock, extending across the mouth of it, and forms a most beautiful cascade."

In the ensuing years, Cartwright makes little specific reference to salmon at Mary's Harbour, these presumably being included with his catches from St. Lewis Inlet and Sound.

St. Lewis River

St. Lewis Inlet is north of the known fisheries of the sixteenth and early seventeenth centuries, and no specific reference to it was noted in early concessions by the Governor of New France. St. Lewis River, at the head of St. Lewis Inlet about 20 miles from Mary's Harbour, was first visited by Cartwright on Thursday, June 7, 1771, when he, "sailed up the Bay [St. Lewis Inlet] . . . and there found a large river . . . I named the river, the Colleroon . . .."

Cartwright had at least three salmon posts in St. Lewis Inlet, one near the mouth of St. Lewis River, one at Mary's Harbour River, and one at Port Marnham on the north side of St. Lewis Sound. He probably began salmon fishing there in 1771 and was there the following year as well. There is little mention of the St. Lewis Inlet area in the edited version of Cartwright's diaries, but he doubtless continued the fishery there until his Labrador interests were disposed of in later years. The next known reference to St. Lewis River salmon is for 1865, in which year the Labrador Circuit Court reported that the "Main River" in St. Lewis Inlet yielded an annual average of seven tierces of salmon.[38]

Alexis Bay Rivers

Alexis Bay, like St. Lewis Inlet, seems to have received little attention from Europeans prior to George Cartwright's arrival on the scene. Three streams, of which Alexis River is by far the largest and best salmon producer, flow into it. The other two are Shinney's Brook (also called Shinney's Waters) and Gilbert River. The latter is blocked to anadromous fish at tide-water. All have a reputation equally good for sea-trout and salmon, a situation which may have also existed in Cartwright's time.

Cartwright visited Alexis Bay in 1770, during his first summer in Labrador; and again in 1771, "to try for fish and baits about Point Spear and Cape St. Francis . . .." In September, 1774, he sent men to Alexis River to overwinter and make hoops used in the construction of salmon tierces and barrels, presumably for use in the immediate area. The salmon fishery in Alexis Bay has continued to the present day.

Sand Hill River

Cartwright first mentioned the Sand Hill River area on July 23, 1775, when he noted that he was anchored in Sand Hill Cove enroute to Sandwich Bay, He does not record when salmon fishing began there, but on July 12, 1779, he notes that "Coughlan's crew" had already taken more than 100 tierces at that site and, "still had strong fishing". Based on the time of entry in a typical recent year, it is probable that not more than one third of the spawning run had entered Sand Hill River by that date in 1779. Assuming that their nets and traps would have captured most fish entering the river, his crew should have taken about 300 tierces of salmon there that year if they continued fishing, about 100 000 lb in round weight. Based on the grilse:salmon ratio and average weight measured in the late 1960's and early 1970's at Sand Hill, this may have represented 13 000–14 000 grilse and 5 000–6 000

salmon, for a total escapement of 18 000–20 000 fish. However, in 1785, only 80 tierces were reported from "Sandhill Cove."[39]

In 1967, Sand Hill River was picked by the then Department of Fisheries of Canada as a research site to help determine the effects on Labrador salmon stocks of the West Greenland salmon fishery. To this end, its juvenile and adult salmon populations were monitored and tagged from 1969 to the mid-1970's.[40, 41] During these years, the highest spawning escapement recorded was 4 525 grilse and 489 large salmon in 1973, these being the survivors of a commercial fishery that removed about 90% of the salmon and 40% of the grilse before they reached the river. It may be roughly calculated that, had there been no commercial fishery, about 7 500 grilse and 5 000 salmon would have entered the river in 1973 for a total of 12 000–13 000 fish.

Except for Cartwright's, there are few references to Sand Hill River prior to 1910, one being that of an agreement between Arthur Hunt (perhaps of the firm of C. & E. Hunt & Company) and a salmon fisherman named Reeves, dated 28 September, 1827. Its main points were that Reeves had the right to fish "Sandhill Brook" but would deliver all of his salmon to Hunt, half to be his own, the other half the price of his fishing privilege. Expenses incurred in the fishing operation were split equally between Reeves and Hunt.[42]

In 1865 it was reported that Sand Hill River produced 40 tierces of salmon, mostly small, each year.[43] In 1873, the firm of A. B. Hunt and Company sold their fishing rights on the Sand Hill River to the Hudson's Bay Company for 2000 English pounds.[44] The river received mention as a good angling stream several times in the early twentieth century, once as the best for fly fishing on the Labrador coast. In 1911, the Hudson's Bay Company still owned the fishing rights.[45]

Sandwich Bay Rivers

Three large salmon rivers flow into the western end of Sandwich Bay, the Paradise, Eagle, and White Bear. They are considered together in this discussion of their discovery and early exploitation, which is essentially the same for each of them. The bay is located north of the Basque fisheries conducted during the sixteenth and seventeenth centuries, and in the early 1700's seems to have been overlooked by the French in favour of sites to its south and north. Louis Fornel's narrative of his 1743 journey of exploration says that his ship entered "Riviere au Sable", now identified as Sandwich Bay, in early July of that year.[46]

George Cartwright first sent men to Sandwich Bay in the fall of 1774 to prepare for the 1775 fishery.[47] He arrived on June 27 of the latter year. His first operations were at Paradise Point, near the mouth of the river of the same name. A few days after his arrival, fishing was in full swing, the salmon being "the largest, fattest and best" that he had seen in Labrador. On July 6, they, "killed thirteen tierces and left the nets full . . . ." Shortly afterwards he went to what is now Cartwright Harbour where he picked a site for "Caribou Castle", his residence in Sandwich Bay. On July 26 he learned that his crew had caught and packed 140 tierces of salmon during his absence, but were almost out of salt. Salmon had been so plentiful that they had removed two nets from the water, having begun to use them again just before his return. That fall he reported to Lord Dartmouth in London that he had, "taken possession of all the salmon rivers in this Bay; and shall keep twenty-seven people here this winter . . . ."[48] His operation was of substantial size as is indicated by the number of men kept on overwinter, these usually being few in relation to the numbers brought out from England each spring.

Cartwright was the first known European to exploit the salmon runs to Sandwich Bay rivers and, for a few years, they were a bonanza. His records for 1775, for instance, show that: on July 30 his men packed five tierces and caught 203 fish; on August 2, four tierces and 167 fish; and, on August 4, six tierces and 225 salmon, plus one trout. The round weight equivalents (at the 300 lb per tierce that he gives) were about 1500 lb, 1200 lb and 1800 lb, respectively.

While fishing was in progress at his Paradise post, Cartwright took time out to explore and, on August 1, discovered and named Eagle and White Bear rivers. He described his initial visits as follows:

"I came to the mouth of a large river, which I named Eagle River . . . appearing to be much frequented by salmon and bears . . . Returning to the skiff, we rowed . . . into another large river, to which I gave the name of White Bear River . . . ."

About the latter river, he said that somewhat above the head of tide was:

"a most beautiful cataract . . . with a deep pool underneath. It was so full of salmon, that a ball could not have been fired into the water without striking some of them. The shores were strewed with the remains of thousands of salmon which had been killed by the white bears, many of them quite fresh; and scores of salmon were continually in the air, leaping at the fall; but none of them could rise half the height."

On July 26 of the following year, he was again at White Bear River, 214 salmon being "killed" there that day. On the following day, 456 salmon were taken, and 156 on the next. On August 14, it was to the "salmon leap" again, this time taking 78 fish. The work was fatiguing and he took along a "tierce of porter" (about 42 gallons) for his men, some of whom imbibed so freely that, "the taylor was near being drowned."

Cartwright makes little reference to salmon in 1777, most of his energies being applied to the cod fishery. The year 1778 also seems to have been rather slow for salmon and on July 19, when salmon should have been entering the rivers in peak numbers, he noted that there were, "no fish going, and only seventy tierces on shore" at White Bear River. A few days later he rowed upstream to Eagle River falls, having shot five polar bears enroute, and described the scene when he arrived as follows:

"Immediately beneath was a deep pool . . . a spacious basin of three hundred yards diameter . . . The water being

low, there was a space of some yards between it and the woods . . . In the lower part of the pool were several island rocks . . . with salmon innumerable, continually leaping into the air, which had attracted a great concourse of bears, some of them diving after the fish: and I have often observed them to get upon a rock, from whence they would take a high leap [and] . . . dive to the bottom . . .."

He counted 32 polar bears at the pool and killed two more. He also counted three black bears but, "there were certainly more". Fortunately for the bears, he ran out of ammunition, something that had not happened to him before.

The American Revolutionary War was in full swing during these years and in 1778 Cartwright's post at Sandwich Bay was raided by the Privateer *Minerva*. He lost practically everything of value that he had, including his salmon catch and stores, and some of his men. This incident cost Cartwright about 14 000 English pounds and he never fully recovered financially from it. It ended his fishery for 1778.

The fishery at Sandwich Bay in 1779 seems to have been excellent, 350 tierces of salmon having been packed by July 18. By that date they had used all of their salt and had to take most of their nets ashore, salmon still being "in prodigous plenty". Just prior to that time, and fishing at a reduced level using six nets or less: "they were killing thirty-five tierces, or seven hundred and fifty fish a day, and might have killed more with more nets." They filled 390 tierces. At an equivalent round weight of 300 lb per tierce (the figure Cartwright uses), this was about 14 lb per fish, close to the 15 lb average which he reported. Cartwright's editor says that he took 12 396 salmon between June 23 and July 20.

Recent angling statistics for Eagle River, which may be biased towards larger fish, indicate an average weight of less than 5 lb, the escapement being about 90% grilse. However, if the commercial fishery, which is believed to take about 90% of the larger fish and 50% of the grilse before they reach the river, is taken into account, average size today may not be greatly different from what it was in 1779.

Cartwright returned to England in late 1779 and did not visit Labrador again until September 1783, only to learn that he had netted just 71 tierces of salmon in Sandwich Bay that year. The following year was a bit better, Gosling reporting 400 tierces from Sandwich Bay and 80 in "Sandwich Cove".[49] He went to Labrador again in 1785, returning to England in 1786. He still retained his Labrador posts in 1793, when he testified that they had cleared him over 100% profit in the previous years.[50] Some time after this they became the property of Noble and Pinson, which company was dissolved around 1811–12. The Sandwich Bay posts were successively owned by several others, including A.B. Hunt and Co. in 1868 or 1869, which firm sold them to the Hudson's Bay Company in 1873.[51]

Lieutenant Chappel reported eight or nine British settlers in Sandwich Bay in 1813, "Mr. Pinson's" firm taking about 200 tierces of salmon each year by nets extended across the river during the spawning run.[52]

Philip Beard and Company owned Cartwright's Sandwich Bay posts in 1816, but found when they went there to prosecute the fishery, that:

"a Mr. MacPherson . . . from Nova Scotia . . . had taken possession of that part of the Bay, and was fishing for salmon and preventing the salmon from taking the usual course to the Rivers."[53]

A complaint was lodged with the Fisheries Protection Patrol and the Captain ruled that no "strangers" were to, "lay down their nets within three miles of the boundaries of rivers fished by the proprietors . . .."[54] However, Beard's fishery continued to be interfered with and, around 1819, he wrote that:

"instead of the average 750 tierces of salmon as caught prior to 1817, the quantity caught last year was only 450 tierces to 250 tierces having been "caught by Mr. MacPherson and by vessels from the United States and from Nova Scotia, at the very mouths of rivers and bays . . .."[55]

As a result of Beard's protests, the Governor of Newfoundland promulgated regulations in 1820 for the "mixed parties" fishery in Sandwich Bay (apparently for Nova Scotians and Americans but not the British proprietors), the gist of which was that:

— Salmon and herring nets were to be set at least 40 yards apart and, when that close, salmon nets could not exceed 30 fathoms in length or herring nets 20 fathoms.

— Nets were not to be set after sunset or hauled before sunrise.

— "Strangers" were not to set nets within three miles of rivers being fished by the proprietors.

— Boundaries, inside of which "strangers" were not to fish, were set for the Eagle, White Bear and Paradise rivers.[56]

In the early days, proprietors of river fisheries had fished them with men brought out from the British Isles each summer. Later on, when their men began to settle in Labrador, they leased fishing rights to them, as in the 1833 agreement between C. & E. Hunt and Co. and James Edwards for the fishery in "Paradise Brook", whereby Edwards got two thirds and the company one third of the salmon he caught. Fishing expenses were divided the same way.[57] Similarly, the fishery at White Bear River was sublet to Henry Ferris, catch and expenses being divided so that if more than six tierces were taken, one sixth went to the company; if less than six, the whole belonged to Ferris.[58] Catch figures quoted in the latter agreement suggest that production at White Bear River had dropped dramatically from what it was in Cartwright's time.

In 1841, it was reported that "Messrs. Hunt" took about 30 tons of salmon from Eagle River, and from the adjoining rivers "almost as much".[59] This was well within the known annual production of Sandwich Bay in these years. Large

numbers were also reported taken at Sandwich Bay in 1852,[60] and in 1863 it was reported that:

"The catch of salmon has been very large, particularly in Chateau and Sandwich bays: in the latter 1500 tierces were caught, principally in Eagle River, where 34,000 lb have been preserved fresh. Messrs. Hunt have also established two other posts for preserving, at Paradise River and Divers Islands . . .."[61]

This is the first indication of canneries being established on the Labrador coast. That same year, the Chief Factor of the Hudson's Bay Company in Hamilton Inlet, Donald Smith, wrote to his London superiors as follows:

"I would bring to the notice of the Board a new Branch of business which from the minute enquiries I have made, I feel would be attended with considerable profit, and for carrying on which one of our stations in Esquimaux Bay is well adapted. I refer to the preserving of salmon fresh in tins. This business has "been carried on by Messrs. Hunt and Henley for several years back, and . . . this season they . . . [are] intending to preserve not less than 50,000 lb."[62]

Although Donald Smith's 1863 letter says that Hunt and Henley had been canning salmon "for several years back", the precise date for Sandwich Bay has not been determined. The first significant amounts known to have been canned in Newfoundland were in Green Bay and Trinity Bay in 1855.[63] Canneries were still operating in Sandwich Bay in 1873 when the firm of A.B. Hunt and Company was bought out by the Hudson's Bay Company, and Grenfell said that a cannery was operating on the Eagle River for several years after his arrival on the coast in 1892.[64, 65] However, another author who visited Sandwich Bay in 1903, referred to:

"The island of rocks on which perches the salmon post . . . with its little white houses and . . . half-dismantled buildings where years ago salmon in enormous quantities were canned . . .."[66]

The fact that Labrador canned salmon appears only occasionally in the official record in these years means little, the catch usually going directly to the overseas market without clearing customs. Moreover, some may have been exported via insular Newfoundland or have been consumed in the local market.

In 1865, Judge Sweetland of the Labrador Circuit Court wrote that the Sandwich Bay fishery was monopolized by the firm of Hunt and Henley, its production of about 700 tierces per year being the largest on the coast; Eagle River yielded about 40 tierces per year and was the only major river then used in the fishery.[67] Another source gave the salmon catch in Sandwich Bay as 600 tierces of pickled and 50 000–70 000 lb canned.[68, 69] The Naval Fisheries Protection Patrol said that A.B. Hunt and Company shipped 400 tierces of pickled fish and 40 000 lb of canned in 1869;[70] and in 1870, 290 tierces of pickled salmon were reported shipped from Sandwich Bay.[71] The 1871 catch was only about one-half the usual amount,[72] that for 1872 being "very short of an average voyage".[73]

Reports on the 1874 salmon fishery are conflicting. On the one hand, the Circuit Court reported it as "quite a failure";[74] while on the other, Captain Howorth of the Fisheries Protection Patrol said that it was better than for the previous four years.[75] The 1874 census report seems to support the latter assessment, noting that 625 "barrels" (which, perhaps, should have been tierces) of pickled salmon were preserved in Sandwich Bay that year.[76] Captain Howorth's successor estimated that 800 tierces would be taken at Cartwright in 1875. He described the Sandwich Bay fishery as follows:

"The season is just over; the catch today being about sixty, which they account nothing and chiefly grilse. To give an idea of the number of fish that go up the river . . . one of the men who has been here twenty years, told me that he had seen as many as eleven hundred taken in one day. . . . There are not so many salmon taken here as there used to be, but that is accounted for by the increased number of nets in the bay; altogether I was told that the number of salmon taken in the whole bay had not decreased."[77]

White Bear River had diminished in importance by that time, and no one fished it.

In 1876, reported as one of the best years on record for Sandwich Bay, 1443 tierces of salmon were reported packed in Labrador as a whole.[78] Ten thousand pounds were reported canned, presumably in that bay, in 1881.[79]

Table 3.1 roughly categorizes the Sandwich Bay salmon fishery in terms of relative abundance, sometimes based more on the apparent ease with which salmon were taken than on actual figures. Such figures as there are have been translated into qualitative terms, thus: "low" (less than 500 tierces), "average" (500–1000 tierces), and "high" (more than 1000 tierces).

Even though the tabular record is fragmentary, some tentative conclusions may be drawn. For instance, the initial fishing years of 1775 and 1776 could have had no impact on the apparent low abundance of salmon in 1777, suggesting major population fluctuations due to natural causes. It also seems likely that the high catches of 1812 and 1813 were as much due to the effects of the War of 1812 (less competition, high demand, increased local fishing pressure) as to higher than usual salmon populations.

The record for the years 1814–1862 is a sparse one. However, data for the 1870's suggest that major fluctuations in Sandwich Bay salmon populations were in general agreement with those in insular Newfoundland, as well as elsewhere in eastern North America where records were just beginning to become available.

An item of interest relating to Sandwich Bay salmon was the attempt to transport live salmon from there to the European market in 1908, the only known record being that of Dr. Grenfell, who described it as follows:

"Last year, 1908 . . . Mr. E. Gibbs of Aberdeen, Scotland, brought over a large tank steamer, in which to carry home to England live fish. He is fishing in a new way to

TABLE 3.1. Apparent salmon abundance in Sandwich Bay, 1775–1909 (sources given elsewhere).

Year	Apparent abundance	Year	Apparent abundance	Year	Apparent abundance
1775	Average	1826	Average	1872	Low
1776	Average	1827	Low	1874	Average
1777	Low	1829	Average	1875	Average
1779	High	1830	Low	1876	High ("fabulous")
1783	Low	1841	Average	1879	Low
1785	Low	1852	High	1881	Low ("Scarce")
1790	Average	1863	High	1882	Low
1792	Average	1865	Average	1883	Low
1804	Low	1867	Average	1884	Average
1810	Average	1868	Average	1890	Low
1811	Average	1869	Low	1900	Average
1812	High	1870	Low	1908	Low
1813	High	1871	Low	1909	Average

Labrador, pursuing the fish with a floating trap net . . . He has brought houses, men, and tackle. Three trips in a year would fully satisfy him."[80]

The outcome was not all that good, the same author reporting some years later that, "The experiment in a steamer from England in Sandwich Bay was a ruinous one, and never repeated."[81]

Hamilton Inlet Rivers

Ignoring possible Viking landfalls, Hamilton Inlet was discovered in 1586 by the English explorer John Davis during his search for the Northwest Passage. From that time until the early nineteenth century its common European name was Esquimaux Bay. Its present name was bestowed by Captain William Martin in 1821 for the then Governor, Sir Charles Hamilton. That part of Hamilton Inlet east of the Narrows has long been known as Groswater Bay, a name bequeathed it by the early French. To the west it is known as Lake Melville, after the first Viscount Melville, Lord of the British Admiralty from 1804 to 1805.

European exploration of Hamilton Inlet's resources may have begun as early as 1702 with the grant to Courtemanche noted earlier. French traders were soon active there and one Louis Fornel applied in October, 1742, for authority to explore the "Baye des Esquimaux". The report on his exploratory trip said that he entered Exquimaux Bay on 10 July 1743.[82] Two men that he left there to explore further were the first Europeans known to overwinter in Hamilton Inlet. Apparently, they were landed near Rigolet, from where they travelled to North West River and built a trading post.[83]

English participation in the Hamilton Inlet fishery probably began in the late 1770's with a man named William Phippard, described in a letter of 1777 as a "salmoneer" or salmon catcher.[84] George Cartwright's diary of September 19, 1778, said that Phippard was "going with four hands to winter in Ivucktoke Bay [another early name for Hamilton Inlet] . . .." And, on June 18 of the following year, he says that Phippard and his crew arrived at Sandwich Bay, from Ivucktoke Bay, on their way to Sandhill Cove.

Ten years later, Cartwright made application for a grant at "Touktoke Bay" (yet another name for Hamilton Inlet), making reference to two Canadians and two Englishmen already there.[85] The Englishmen were probably the aforementioned Phippard and an associate. The two "Canadians", probably French, are unknown. A post occupied on the Mulligan River around 1807 was later owned by D.R. Stewart of Quebec City.[86] By that time, posts were also established at "Kenomish" and other places in Esquimaux Bay, and the "settler" fishery was becoming established.[87] A survey of Hamilton Inlet in 1821 reported many "Canadian" salmon establishments there.[88] In August, 1826, the first Court of Civil Jurisdiction in Labrador was held at Rigolet. It dealt with a salmon fishing dispute on the "Kenemich" River.[89] There was a similar dispute in 1829, the same year that the King's Post Company of Quebec purchased the fur and salmon trade at Rigolet and "Kennemish" from J. O. Bennett and Company.[90] The Court was discontinued in 1834 but reinstated again in 1863.

The Hudson's Bay Company arrived on the Labrador scene in 1834, when an employee enroute from Fort Chimo to Mingan mistakenly ended up in North West River.[91] At that time there were trading posts at both North West River and "Rigolette", both owned by Quebec City interests.[92] "The Bay" established posts at both these places in 1836 and, shortly thereafter, outposts at Mulligan, Kenamu, and Grand (Churchill) rivers, and at "Shabis Kacho" (Sebaskachu River).[93, 94] With the advent of these activities, the settler population of Hamilton Inlet began to increase, rising from less than 100 in 1840 to about 500 in 1891.[95] Other trading establishments also secured salmon in these years, as did traders and fishermen from Nova Scotia and insular Newfoundland.[96]

Records of the Hamilton Inlet salmon fishery are sparse during the nineteenth century, the first known figures being from the Circuit Court report of 1827, which noted 200 tierces produced there that year. The next ones are for 1840 when the Hudson's Bay Company exported 120 tierces, "when formerly it surpassed 400 tierces."[97] In 1852, however, the salmon catch was "the highest ever", 1200 tierces being shipped by one firm.[98] In 1865, only 200 tierces were reported shipped from Groswater Bay where, "usually five times that number "are caught."[99] That same year the Hudson's Bay Company bought out two more of its local competitors, continuing a process begun many years ealier.[100, 101]

The Company built a salmon cannery at "Kennimish" in 1867,[102] a "pretty good" year for salmon, the following one being even better.[103] Catch was still "pretty good" 2 years later when several Nova Scotian and Canadian vessels participated in the fishery.[104] However, by 1871 the catch in Hamilton Inlet had fallen by one-half, and in the following year was, "very short of an average voyage . . .."[105] Two years later it was, "quite a failure", though "unusually good" on the outside coast.[106]

According to the 1874 census, 877 barrels (tierces?) of salted salmon and 39 000 lb of canned were produced in Hamilton Inlet that year. By then, though few specific figures are available, catches had decreased from earlier years, and were down even further in 1875. In 1876, the Hudson's Bay Company decided not to operate the cannery at "Kinonish".[107] Figures for the next three census years suggest a continuing downward trend, a situation largely paralleled at Sandwich Bay.

During these years, the Hudson's Bay Company had a virtual trading monopoly in Hamilton Inlet, though salmon were also taken by Nova Scotian "traders" and Newfoundland fishing schooners. More substantial competition arrived in 1901 with the establishment at North West River of the Paris based firm of Revillon Frères. In that same year, the Grand River Pulp and Lumber Company began logging and sawmilling operations at Gillisport in Carter Basin, probably the first man-made activity in Labrador to have had any significant impact on the salmon's freshwater environment. It lasted only for about a decade, closing down around 1912.[108]

In summary, the English Labrador salmon fishery began in either the Temple Brook or St. Charles River area in the 1760's. By the early 1800's most Labrador Rivers were probably either fully exploited or well on the way to that objective. The surviving record of the catch prior to the twentieth century is discontinuous and many years are a complete blank. For most, the Annual Reports of the British Naval Fisheries Protection Patrol are still the main source of information, such numerical data as there are for the period under study being more fully discussed in the following chapter.

Footnotes

1 Browne 1909: 57–58.
2 Nicholson 1954.
3 Barkham 1978: 8–19.
4 P.C. 1415: 3769–3680.
5 P.C. 1417: 3689.
6 P.C. 1403: 3655–3659.
7 P.C. 1277: 3280–3302.
8 P.C. 1405: 3662.
9 Gosling 1910: 203, 382.
10 *Ibid.*: 200–203; P.C. 310.
11 Lysaght 1971: 451.
12 Rogers 1911: 143–144.
13 Townsend 1911.
14 Grenfell 1913: 337–338.
15 Innis 1940: 294.
16 Browne, *op. cit.*: 222.
17 Thornton 1977: 160.
18 Chappell 1813: 108–110.
19 *Ibid.*: 144.
20 *Ibid.*: 111.
21 Howorth 1874: 16.
22 Erskine 1875: 11.
23 Kennedy 1885: 53.
24 Browne, *op. cit.*: 225.
25 Barkham, *op. cit.*: 14.
26 P.C. 1417: 3688.
27 Rogers, *op. cit.*: 143.
28 P.C. 410: 1288–1289.
29 Bdy. Dispute Doc., Box 8, Folder 14.
30 Browne, *op. cit.*: 224.
31 P.C. 1417: 3688–3689.
32 Lysaght, *op. cit.*: 140.
33 Gosling, *op. cit.*: 382.
34 P.C. 1405: 3662.
35 P.C. 1277: 3283.
36 Townsend, *op. cit.*: 44.
37 Townsend, *op. cit.*: 13–14.
38 P.C. 410: 1288.
39 Bdy. Disp. Doc., Box 9, Folder 1.
40 Peet 1971: 1–43; 98–115.
41 Pratt et al. 1974: 1–27.
42 P.C. 357: 1237.
43 P.C. 410: 1288–1289.
44 P.C. 1316: 3423.
45 Prowse 1911: 101.
46 P.C. 1277: 3290.
47 P.C. 1100: 2772.
48 P.C. 305: 1160–1161.
49 *Op. cit.*: 385.
50 *Ibid.*: 249.
51 P.C. 1316: 3423.
52 *Op. cit.*: 159.
53 P.C. 337: 1209.
54 *Ibid.*
55 *Ibid.*: 1210.

[56] P.C. 341: 1216–1217.
[57] P.C. 357: 1238.
[58] *Ibid.*
[59] P.C. 404: 1282–1283.
[60] J.N.H.A. 1853: 130.
[61] J.N.H.A. 1864: 470.
[62] P.C. 1588: 4154.
[63] J.N.H.A. 1856: 161. However, the Blue Book for 1852 records 18 cases from the Island.
[64] P.C. 1316: 3423.
[65] P.C. 1039: 2566.
[66] Durgin 1908: 73.
[67] P.C. 410: 1288–1289.
[68] *Ibid.*
[69] P.C. 533
[70] J.N.H.A. 1870: 493.
[71] J.N.H.A. 1871: 647.
[72] P.C. 538: 1469–1471.
[73] P.C. 539: 1472–1473.
[74] P.C. 542: 1478–1479.
[75] *Op. cit.*: 19.
[76] Census Return 1874.
[77] Erskine 1875: 48–49.
[78] J.N.H.A. 1877: 829.
[79] J.N.H.A. 1882: 324.
[80] *Op. cit.*: 339.
[81] P.C. 1039: 2570.
[82] P.C. 1277: 3280–3302.
[83] Zimmerly 1975: 49.
[84] P.C. 392: 1269–1272.
[85] P.C. 319: 1178–1183.
[86] *Ibid.*: 59.
[87] See P.C.'s 1302, 1303.
[88] P.C. 343: 1222.
[89] Zimmerly, *op. cit.*: 64
[90] P.C. 503: 1508.
[91] Zimmerly, *op. cit.*: 87.
[92] P.C.'s 1311, 1312.
[93] *Ibid.*: 4144–4146.
[94] Zimmerly, *op. cit.*: 90.
[95] *Ibid.*: 150–151.
[96] Browne, *op. cit.*: 59–60.
[97] P.C. 1025: 2484.
[98] J.N.H.A. 1853: 130.
[99] Packard 1891: 399.
[100] P.C. 1314: 3421.
[101] P.C. 1316: 3423.
[102] P.C. 87; also in Zimmerly, *op. cit.*: 129.
[103] P.C. 533: 1452–1456.
[104] P.C. 535.
[105] P.C. 539.
[106] P.C. 542.
[107] Bdy. Disp. Doc., Box 11, Folder 4.
[108] Zimmerly, *op. cit.*: 176–178.

CHAPTER 4

Interpretation of the Pre-1910 Catch Record

The salmon here is excellent and in great abundance from June to August, it is taken in nets, placed along the shores in bays and large harbours.

ANSPACH 1827

Sources of Early Data

The earliest records of the Newfoundland salmon fishery originate with the *Returns of the Fishery* which are to be found in the responses to the *Heads of Inquiry* that began around 1676. Both are part of the Colonial Office records for Newfoundland, the prime source of information on its fisheries of the eighteenth and nineteenth centuries. The "Returns" are the paramount source of numerical information on the Newfoundland salmon fishery until the onset of Representative Government in 1832. Figures quoted in this report are mainly from the 1969 compilation by Ryan.[1]

Beginning in 1822, basic statistics of the colony began to be compiled in annual "Blue Books" produced by the Colonial Secretary's Office. For the first few decades, at least, their primary source must have been the "Returns" which, by then, were compiled by the senior officer of the British Naval Fisheries Protection Patrol. The Journal of the House of Assembly began to include fisheries exports from insular Newfoundland as an annual appendix beginning in 1835, though there are occasional missing years, and it is cited here as a primary reference. Gaps in its record are filled by the Blue Books, which were published until 1901.

Figures for Labrador salmon production did not begin to appear in the Journal until the 1860's. Those used here are largely from Gosling's book *Labrador*, published in 1910. Most of his figures also came from the annual reports of the Fisheries Protection Patrol. Occasional data were located elsewhere, as in documents compiled in the 1920's for the British Privy Council's deliberations on the Labrador Boundary Dispute.

Area of the Early Fishery

Newfoundland salmon catches of the eighteenth and nineteenth centuries did not always come from the same coastal area that is now Newfoundland and Labrador. Indeed, there were times when Labrador was not even part of that "Newfoundland" and the fishery occupied only a portion of the island's coastline. At other times, "Labrador" was much larger than it is now. However, since the "Labrador Act" of 1825 set its southern boundary at Blanc Sablon, the coastal area of that part of the province has remained unchanged.[2]

On the Island of Newfoundland, excepting the French Shore, political boundaries did not change as they did in Labrador. Nonetheless, the size of the island's coastal fishery did change, expanding from a few rivers on the east side of the island in the late 1600's to the whole coastal area in the early 1900's.

As indicated earlier, the settler salmon fishery began as a commercial venture late in the seventeenth century in the area between Cape Bonavista and Cape Pine. Early in the following century it spread to the rivers of the north side of Bonavista Bay, and beyond to rivers in Hamilton Sound and Notre Dame Bay. By mid-century, the fishery may have reached the Bay of Exploits and, soon afterwards, White Bay. In the 1760's it also spread along the south coast, and into the Bay St. George and Codroy areas of the west coast, the occasional fisherman being as far north as Humber River in the Bay of Islands. The English salmon fishery in Labrador began about the same time.

When the nineteenth century began, the fishery was well established in all coastal areas of Newfoundland and Labrador except those still claimed by France. It was still conducted mainly by nets and weirs in the rivers, and by nets in estuaries and harbours. Fishing area expanded in the mid-1840's on the Burin Peninsula, when it was discovered that salmon were available to nets set at headlands and on the open coast. The same thing had been found true somewhat earlier on the east coast with the discovery of the late fall and early winter fishery in the Twillingate and adjoining areas.

The second half of the nineteenth century was largely a consolidation of the fishery in all these areas, plus continued encroachment by settlers in areas north of Bonne Bay on the west coast. When the latter areas were vacated by France in 1904, the salmon fishery came wholly within the aegis of the Government of Newfoundland for the first time.

Conversion Factors and Other Adjustments

Because of changes in the geographic extent of the fishery over the centuries, and of the impact of war and economic upset, the pre-1910 record of the Newfoundland salmon fishery must be interpreted cautiuously. As a prerequisite, this requires that the several market forms of salmon be converted to some common form such as round weight (R.W.), also called "landed" or "live" weight. Insofar as possible, conversion factors should be the same as those in current use. Other adjustments to the primary record may also be necessary.

The record of salmon landings for the period 1910–48, previously compiled with figures of more recent vintage, is that nearest in time to this study. Basic data for its compilation must have also come from the export record, the several market forms, with the exception of pickled salmon in tierces, being converted to round weight using factors known

from contemporary sources. The pickled salmon factor is subject to some uncertainty, as is the estimate for domestic consumption which is also believed to be included in the 1910–48 compilation. Both points are discussed in further detail.

Pickled Salmon Factor

Pickled salmon was the earliest commercial product of the Newfoundland salmon fishery, being salmon preserved in a saturated solution of common salt (pickle), usually in large barrels called tierces. It was the dominant mode of preservation until the advent of refrigeration in the Newfoundland industry late in the nineteenth century, and salmon continued to be exported in that form until shortly after the end of World War II. After 1935, salmon exports were reported in pounds instead of in tierces.

As indicated, the tierce was a large wooden barrel-like container. It came to Newfoundland from Europe, having been in use in the British Isles since at least the late Middle Ages, probably even earlier.[3] In Britain it was defined as one third of a "pipe", an even larger "barrel" used for transporting provisions, including wine. In the wine trade, the capacity of a pipe was 126 gallons. However, the gallon itself was a variable measure until 1707 when it was defined by law as having a capacity of 231 cu. in. (which is still the U.S. gallon).[4] The tierce, being one third of a "pipe", thus contained 42 "wine gallons", each of 231 cu. in., which it remains to this day. The British gallon, however, was redefined by the U.K. Weights and Measures Act of 1824 as having a volume of 271.25 cu. in. (the "Imperial" gallon).

Prior to the arrival of Representative Government in 1832, Newfoundland's weights and measures were the same as those of the United Kingdom. They remained that way until 1841, when the local Legislature passed "An Act to regulate the packing and inspection of pickled fish from this Colony" (Act 4 Vict. C.2, S.3). That Act, which defined the tierce in terms of the amount of dressed pickled salmon that it should contain for export, read as follows:

"each tierce of pickled fish shall contain three hundred pounds of fish; each barrel two hundred pounds . . . each half-barrel one hundred pounds weight respectively, at the least, over and above the quantity of salt and pickle necessary to preserve the said respective quantities of fish."

The Newfoundland Consolidated Statutes of 1892 (C.104, S.16) said essentially the same thing:

"Each tierce shall contain three hundred pounds, and each half-tierce one hundred and fifty pounds; each barrel shall contain two hundred pounds, and each half-barrel one hundred pounds. In each of the above instances, the weight shall be clear avoirdupois exclusive of salt and pickle."

The Newfoundland Consolidated Statutes of 1916, Vol. III (C.161, S.16) repeated that of 1892.

It is clear, therefore, that the official tierce used in Newfoundland for the export of pickled salmon had, from the beginning, a capacity of 42 "wine gallons"; or, as later set out in legislation, contained 300 lb of pickled salmon ready for market. However, it is still sometimes difficult to be certain of the amount of pickled salmon that was represented by a tierce in some years in some localities.

George Cartwright, at Sandwich Bay in Labrador, reported that on one day in July, 1779, his men took 750 salmon which, dressed and pickled, filled 35 tierces of 300 lb each. Assuming a conversion factor from dressed to round weight of 1.5, this was a round weight per tierce of 450 lb, requiring an average weight per salmon, as landed, of about 20 lb. Over the 1779 season, Cartwright said, his men took 12 396 salmon, the average weight of which was 15 lb. They filled 390 tierces, which works out to a round weight of about 476 lb per tierce.[5] Since Cartwright's local consumption was probably included in the number of fish he reported, the seasonal round weight may be a bit higher than it should be.

In 1813, Lieutenant Chappell, an officer of the British Naval Fisheries Patrol in Newfoundland, described the pickled salmon operation at Sandwich Bay as follows:

"when caught, the salmon is split . . . down the back; then salted in tubs . . . for a fortnight . . . . [They are] . . . resalted into tierces, which contain each two hundred pounds of fish, exclusive of pickle and salt."[6]

Somewhere in his description, Chappell went awry. Either he was talking about the barrel or he had his figures wrong, in which latter case it should have been 300 lb, net weight.

R. H. Bonnycastle in his book *Newfoundland in 1842* described the salmon preserving process in terms almost identical to Chappell.[7] Since he was familiar with that author's work, his information may have come from that source. Netboy suggests the same net weight, perhaps also from one of these sources.[8]

With these two exceptions, other early descriptions of pickled salmon specify a net weight of 300 lb per tierce. Thus, Mr. James Winter, testifying before a Select Committee of the House in 1856, said:

"[The salmon] . . . are split through the upper jaw . . . down the back to the tail . . . then placed in puncheons . . . previously salting each separately . . . . After . . . they are placed in tierces of 300 lb each."[9, 10]

An American writer, describing the Labrador salmon fishery in 1908, said that shipment was in barrels, each containing 300 lb of salted salmon.[11] Doubtless, his "barrels" were tierces.

The first major scientific study of Newfoundland salmon was published in 1932. The authors use a figure of 300 lb per tierce to calculate amount of salmon exported using values reported for the years 1888–93, inclusive.[12] They did not convert to round weight.

Thus, a tierce of salmon was supposed to contain 300 lb of pickled salmon, ready for market. Using a conversion factor of 1.5 times the dressed weight, this was a round weight

equivalent of about 450 lb per tierce, the same as given in the Newfoundland Fisheries Board Annual Reports.[13, 14] However, when Newfoundland became part of Canada in 1949, the federal fisheries department compiled the salmon catch records for the period 1910–48 using, as far as this writer can determine, a conversion factor of 1.2 × net weight per tierce, to arrive at a round weight equivalent of 360 lb per tierce. The late A. A. Blair also reported a round weight conversion factor for pickled salmon in tierces of 1.2, having obtained it in the early 1950's from federal officials.[15] So as to be comparable with these latter data, 1.2 is also the round weight conversion factor applied to salmon in tierces in the pre-1910 figures used in this study. However, it appears that a factor of 1.5 would be nearer the true situation.

The "barrel", as well as being a misnomer for "tierce", was also used as an export container for pickled salmon, in which role its capacity was defined as 200 lb of pickled salmon. The same conversion factor noted above (1.2) was applied to its net contents (200 lb) to arrive at a round weight of 240 lb of salmon per barrel. As with the tierce, a factor of 1.5 would probably be nearer the true situation. Huntsman, who used 200 lb as the equivalent round weight per barrel of salmon, said that it, "should probably be higher."[16]

Canned Salmon Factor

Salmon are first reported to have been preserved by canning in Newfoundland in about 1851, in Green Bay.[17] A few years later, in 1856, Thompson reports that Nova Scotians were canning Humber River salmon.[18] However, canned salmon did not become a significant export item until the last years of the nineteenth century. As to conversion factors, Lindsay and Thompson used an equivalent round weight of 48 lb per case, the same as the nominal weight.[19] This report uses a factor of 1.5 × the nominal weight for an equivalent round weight of 72 lb per case, the same as in the Newfoundland Fisheries Board Report of 1940.[20]

Refrigerated Salmon Factor

For purposes of this discussion, "refrigerated" includes the use of ice, as well as freezing by natural or other means. According to the export record, the first frozen salmon were sent to market from Newfoundland in 1879, a few tons going to Canada in that year.[21] Hatton and Harvey say that the export of fresh salmon on ice or in "refrigerators" began around the mid-1870's.[22] Whatever the precise year, it marked the beginning of the end of pickled salmon dominance in the market, though the latter would still be around for many decades.

For about the next 50 years, whether preserved by ice alone, or frozen, or some combination of both, salmon went to market in the round state. This frequently resulted in a poor quality product. However, as late as 1925, salmon were still being frozen "in the round", and when Thompson proposed a scheme of research for local fisheries in 1931, he recommended that:

"Salmon, if they are to be frozen round and apparently the demand is for round fish — and therefore retaining gut, liver, and kidney, should be put through the process within at most two days after being caught, even if kept meanwhile in ice."[23]

By about 1935, "gutting" had made at least some inroads in preparation of frozen salmon for market.[24] However, when the 1910–48 record was being compiled in the early 1950's, the first allocation to "dressed" was 5% in the 1937 catch-year, which was progressively increased until 100% was assumed dressed in 1953.[25] This is the schedule used in this report in recalculating the 1910–48 catch record (Table 4.1). Conversion is complicated by the fact that "dressed" took two forms, "head-on" and "head-off", with no record of the proportion of each in any year during that period. An average factor of 1.15 (head-on = 1.1, head-off = 1.2) has therefore been used in this report to arrive at approximate round weight.

TABLE 4.1. Allocation of fresh and frozen salmon from round to dressed category in change-over between 1936 and 1953.

Year	% Round	% Dressed
1936	100	0
1937	95	5
1938	90	10
1939	85	15
1940	80	20
1941	70	30
1942	65	35
1943	60	40
1944	55	45
1945	45	55
1946	40	60
1947	35	65
1948	30	70
1949	25	75
1950	20	80
1951	10	90
1952	5	95
1953	0	100

Tables 4.2 and 4.3, list the figures, or factors, used to convert the salmon product to round weight on the basis of (a) the container or package in which it was exported (4.2), and (b) the manner in which it was preserved (4.3).

Allowance for Domestic Consumption

Domestic consumption is that part of the annual catch consumed within Newfoundland and Labrador itself, as opposed to that marketed farther afield. Prior to 1949, most of Newfoundland's salmon catch was exported, and the export records are the source of most "catch data" for these years. No such record exists for domestic consumption, which must therefore be estimated.

No allowance for domestic consumption is included in annual figures for the pre-1910 years that are the subject of this study. However, all statistics since 1949 do include such an allowance, as is also believed to be the case for the 1910–48

TABLE 4.2. Equivalent round weights attributed to containers of market product. (Figures used in this report indicated by an asterisk.)

Container	Equivalent round weight (lb)	Sources and comment
Tierce	360 lb*	Apparently used in previously compiled statistics of the Newfoundland salmon fishery. Equals net product weight per tierce × 1.2.
Tierce	200 lb	Chappell 1818: 159. Dressed salmon only. Also in Bonnycastle 1842: 159; probably from same source.
Barrel	240 lb*	Apparently used in previously compiled statistics of the Newfoundland salmon fishery. Equals product weight per barrel × 1.2.
Barrel	200 lb	Huntsman 1931: 8. Says, "should probably be higher."
Case	72 lb*	Nominal weight per case (48 lb) × 1.5. As used in official statistics.
Case	84 lb	Huntsman 1931: 8.
Case	70 lb	Ann. Rep. Nfld. Fish. Bd. for 1937 and 1938: 18.
Case	68 lb	Maurice 1938: 146. For case of 1 lb tins (case of half-pound tins equals 60 lb).
Box	100 lb	Blair (unpublished data). Sometimes 75 lb. Probably net weight.
Box	75 lb	Blair (unpublished data). Sometimes 100 lb. Probably net weight.
Kit	20 lb	Blair (unpublished data). Probably net weight.

TABLE 4.3. Conversion factors applied to market products to convert to equivalent round weight. (Figures used in this report indicated by an asterisk.)

Market product	Conversion factor	Source and comment
Pickled salmon	1.2*	1.2 × net weight of product.
Pickled salmon	1.5	1.5 × net weight of 200 lb. Chappell 1818; Maurice 1938; Ann. Rep. Nfld. Fish. Bd. for 1937 and 1938.
Canned salmon	1.5*	1.5 × nominal weight per case of product. Ann. Rep. Nfld. Fish. Bd. for 1937 and 1938.
Canned salmon	1.75	1.75 × nominal weight of canned product. Huntsman 1931: 8.
Frozen salmon: Dressed/head-on	1.1*	Fish. Stats. Can. 1960.
Frozen salmon: Dressed/head off	1.2*	Fish. Stats. Can. 1960.
Smoked salmon	1.3*	Blair (unpublished data).
Smoked salmon	1.7	Huntsman 1931: 8; Ann. Rep. Nfld. Fish. Bd. for 1937 and 1938.
Smoked salmon	1.6	Maurice 1938: 146.
Dry salted salmon	1.6	Ann. Rept. Nfld. Fish. Bd. for 1937 and 1938. Sometimes sold in packages of 75 or 100 lb each, or quintals of 112 lb each.

figures previously compiled. So that pre-1910 and post-1910 figures may be more readily compared, an attempt is made to estimate the allowance included in the 1910–48 period by recalculating the annual figures for Newfoundland and Labrador for that period and comparing them with those previously compiled. Resulting figures are given in Table A.1 (appendix). Figure 4.1 shows that previously compiled figures for the years 1936–48 are consistently higher than the ones recalculated for this report by about 875 000 lb, round weight, per annum (range: 850 000–900 000 lb), and it is thought that an amount of about that order represents the annual allowance for domestic consumption included in these years.

There is less agreement between the two sets of data for the years 1910–35 (especially for 1926–31, where major differences may relate to annual allocation of exports). However, a domestic consumption estimate of about three pounds per capita, per annum, during the period (based on the 1935 Census Report data and adjusted for population figures in the 1911 and 1925 Reports) suggests an annual allowance of about 750 000 lb, round weight, in these years. When the data recalculated for this report are adjusted by these amounts (Fig. 4.2), the pattern of agreement is much improved.

It appears, therefore, that in any comparison of pre-1910 figures calculated for this report with those previously compiled for the period 1910–48, the former should include an appropriate adjustment for domestic consumption.

Completeness of the Record

The proportion of salmon taken that was actually included in the export record usually changed only slowly over many years. Clearly, not all salmon caught got into the records for a number of reasons, amongst them being foreign fishermen and traders (Nova Scotians and New Englanders) who took their salmon back to their home ports with them. The French, of course, did likewise on the French Shore. There was also some domestic consumption as just described.

Type and Location of Fishing Operations

Salmon catches over the centuries were affected both by the geographic extent of the fishery and the manner in which it was conducted. Until about 1700 the fishery was confined to the area between Cape Bonavista and Trepassey. However, it expanded rapidly and by 1800 included most coastal areas of Newfoundland and Labrador. While this was taking place, changes were also occurring in how local fisheries were conducted.

Salmon fishing was mainly carried out in rivers and river-mouth areas by weirs and gill nets until about 1750. As competition for space increased, gill nets were extended progressively seaward and by about 1800 most suitable inshore areas were fully occupied. It seems to have been about then, possibly a bit earlier, it was found that salmon

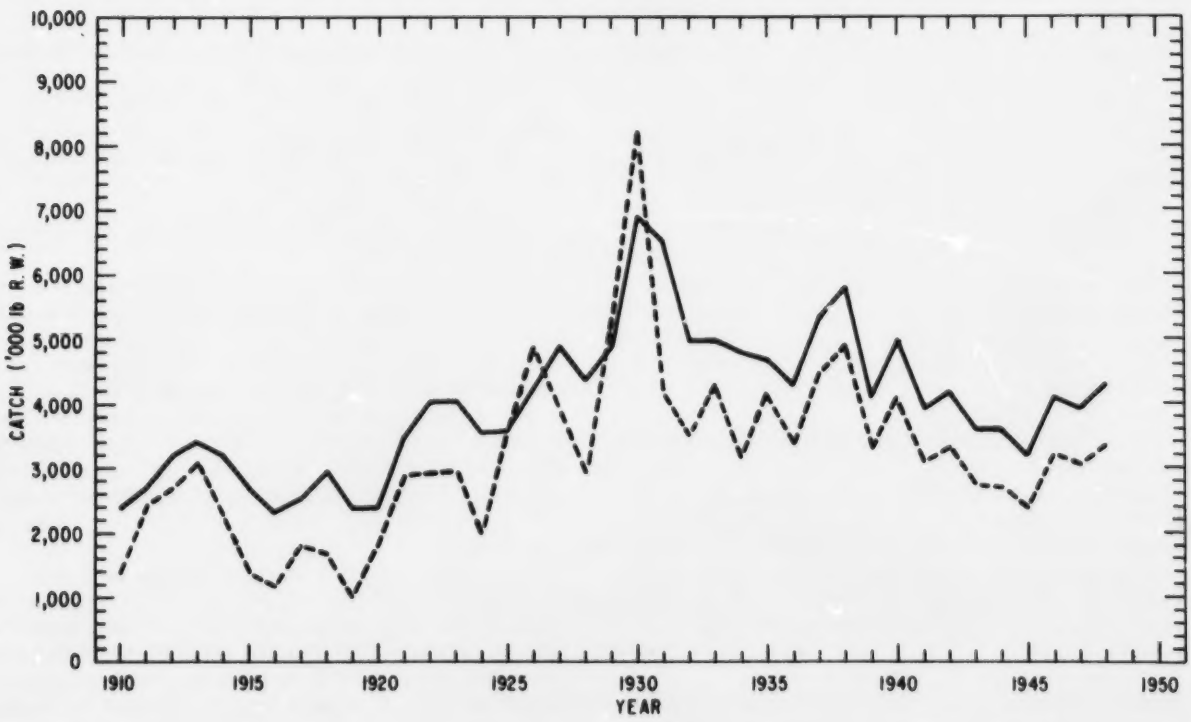

FIG. 4.1. Comparison of previously compiled figures (solid line) for the period 1910–48 with those of this report (broken line), the latter not adjusted for domestic consumption.

could be taken in "outside" areas of the east and northeast coasts — especially in Trinity and Conception bays and the east side of the Avalon Peninsula — before the regular fishery began. It was also about this time that the "fall fishery" came into being, parts of Green Bay and the Fogo–Twillingate areas being notable producers. Testimony before a Select Committee of the House in 1856 suggests that both of these fisheries had existed for some considerable time by then, but mentioned no dates. This was in contrast to other testimony before the same Committee about the "early" (or "headland") salmon fishery in the Burin area of the south coast. In this case, it was specifically stated that it had begun some 10–12 years earlier, or around 1845.

The first legislative efforts to bring some control into what was a largely uncontrolled fishery began in 1862, when legislation was passed prohibiting the complete barring of rivers by nets or weirs. It met with little success, similar legislation also being enacted in 1872 and 1892. Again, there was little immediate effect, due to lack of enforcement. However, the situation must have improved in succeeding years, the 1902 Annual Report of the Department of Fisheries stating that all nets had been removed from the Humber and other rivers. The report for 1904 was even more explicit, saying that, "Since 1900 . . . all netting had been prohibited in our rivers."

The Insular Newfoundland Record

The record of the Newfoundland and Labrador salmon fishery from 1723 to 1909 is based almost entirely on exports, and the term "catch record" is sometimes used as being synonomous with them. This is seldom entirely true but, given the preponderance of exports, is used as a matter of convenient terminology. The annual record compiled for this study is given in detail in Table A.3 and Table A.4 of the Appendix.

The 1723–1909 insular record, not adjusted for domestic consumption, is shown in Figure 4.3 (solid line). It is further extended to 1948 using figures recalculated from exports (see earlier discussion on domestic consumption allowance), and from 1949 to 1975 using figures compiled in these years. The insular component cannot be isolated for the period 1936–51; and when it can, beginning in 1952, it includes an unstated amount for domestic consumption (dot–dash line). So that the post-1951 figures may be more readily compared with those from 1723 to 1935, inclusive, an arbitrary amount of 500 000 lb, representing domestic consumption, has been deducted from each of them (solid line, 1952 onwards). Other lines plotted in Figure 4.3 are for comparison and information purposes only. (Note that 1910–1948 figures recalculated for this report are for comparative purposes only. Where they differ from previously accepted figures, the earlier ones receive priority since their compilers may have had access to information that is not now available.)

The years that are the focus of this study cover almost two centuries of numerical record (1723–1909). For convenience of discussion they are divided into three unequal periods, namely: the eighteenth century (1723–99), the first half of the nineteenth century (1800–49), and the second half of the nineteenth century plus the first 9 years of the twentieth (1850–1909).

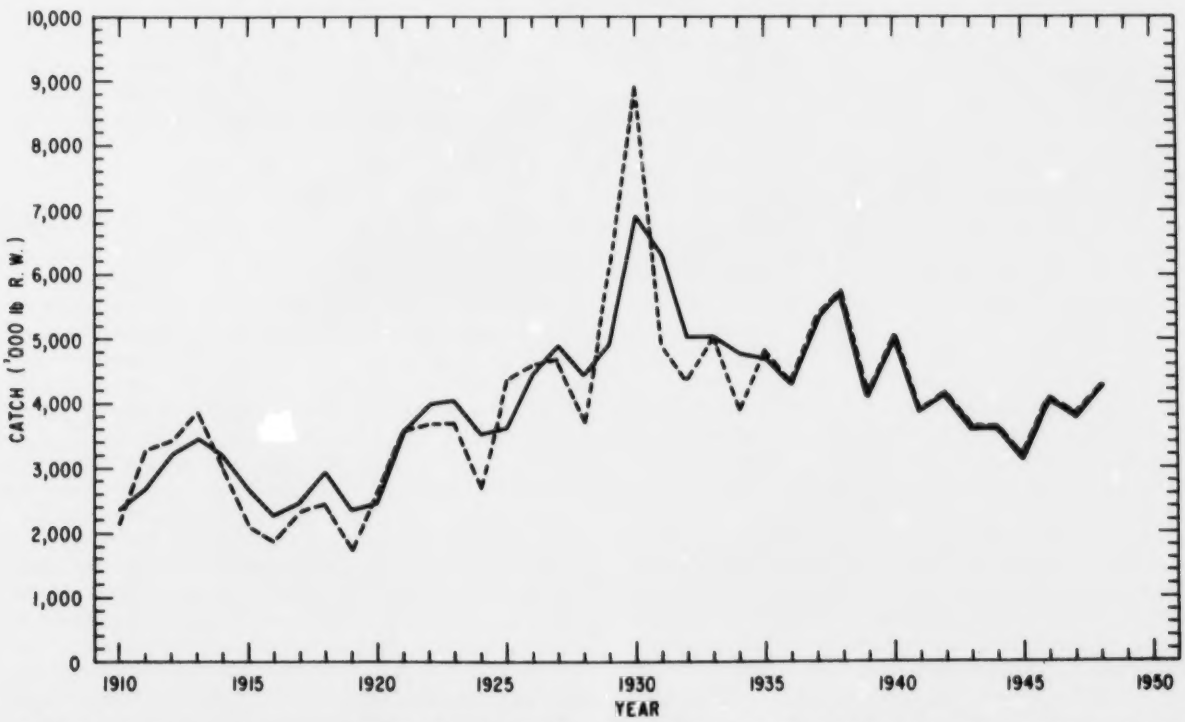

FIG. 4.2. Comparison of previously compiled figures (solid line) for the period 1910–48 with those of this report (broken line), both adjusted for domestic consumption.

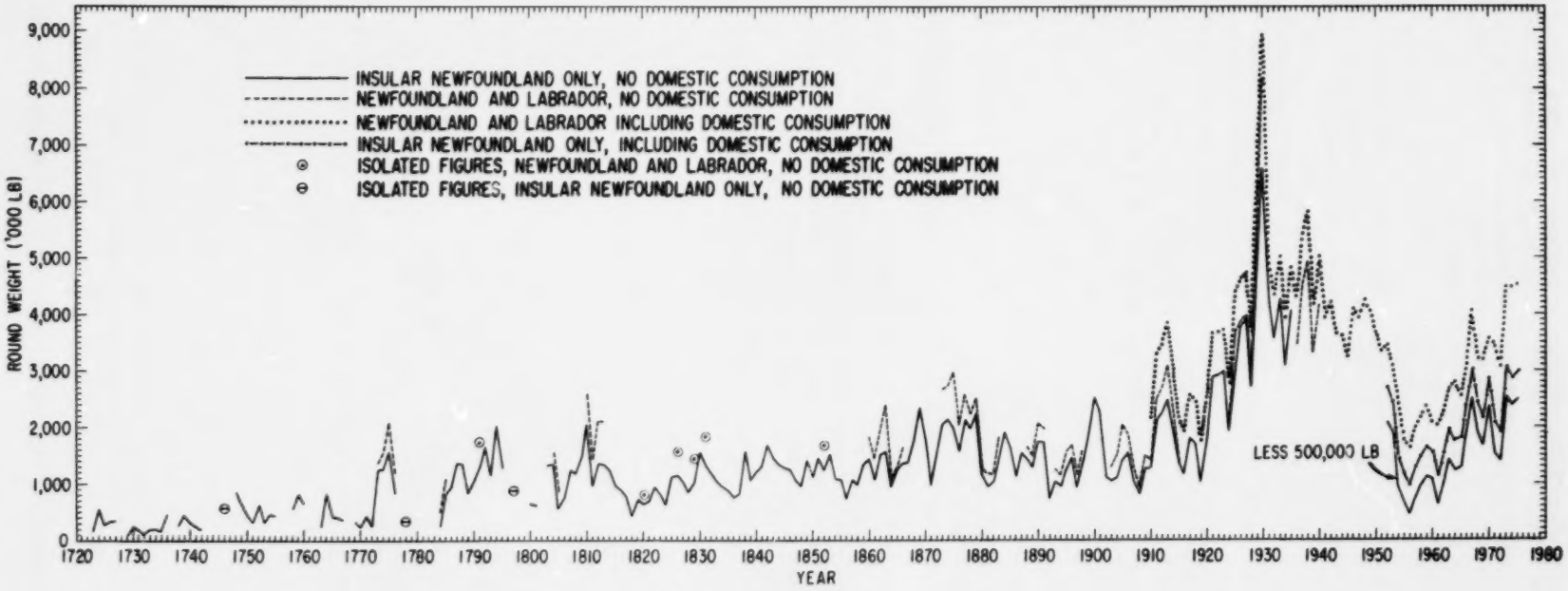

FIG. 4.3. The Atlantic salmon numerical record, mostly exports, for Newfoundland and Labrador for 1723–1909, together with recalculated data for 1910–48, and with further extension to 1975 using published figures.

The Eighteenth Century

Numerical records of the fishery begin with reported exports of 150 000 lb of pickled salmon (all weights are "round") from insular Newfoundland in 1723. During that first 25-year period they averaged about 285 000 lb for each of the 21 years of record. In the next 25 years (1748–72, also 21 years of record) the annual average was about 500 000 lb, indicating some increase in exports, and presumably in catch, over that time period.

Beginning in 1773 exports rose substantially, exceeding 1.5 million pounds in 1775 and averaging 1.25 million pounds over the 4-year period from 1773 to 1776. However, due to the American Revolutionary War then in progress, no further exports of consequence were recorded until 1784, the year following its end. It is worth noting about the increased exports from 1773 to 1776 that, although there had been some increase in resident population after the end of the Seven Years War (from about 7500 in the late 1750's to 12 000 in the early 1770's[26]), at least part of the increase in salmon exports may have been due to a cyclic high in salmon abundance. It is known that during that same period in Sandwich Bay, Labrador, the years 1775 and 1776 were at least "good", while in 1779 salmon were "abundant".

As indicated, salmon re-appeared in the records in 1784 and by 1787 exports had reached about the same level as in 1775, the previous best year. They stayed at that fairly high level until 1795, after which trade was interrupted by the French Revolutionary and Napoleonic wars. During the 11 years since the record resumed in 1785 (1784 is incomplete), exports had averaged 1.25 million pounds, and 1.5 million pounds during the last 5 years, 1794 being the highest to that time. The upward trend of exports over these years indicates a continuing increase in the amount of salmon caught and exported. The closing years of the eighteenth century saw the virtual end of the British ship fishery in Newfoundland and of whatever impact it may have had on the salmon fishery.

1800–1849

Although the opening years of the nineteenth century saw a continuation of the wars then in progress, salmon exports were resumed. In 1805 and 1806, at least partly because of trade difficulties, they were only about one half the level they would reach in the remaining years of that decade. However, with the aid of British bounties for a few years, the highest level recorded to that time was reached in 1810.[27] This bonanza lasted only briefly, and during the War of 1812 (1812–15) salmon exports again fell seriously, in spite of good markets and good prices, suggesting a major decrease in availability during that period.

After 1815 salmon exports declined even farther, 1818 being the lowest of any non-war year since the early 1770's. By that time, war-time prosperity had ended and the colony was in the grip of a severe economic depression. Granting that poor markets may have lowered amounts exported, salmon stocks were also probably very low since, by then, residents had increased from around 20 000 in early the 1800's to more than 42 000.[28] Excepting the years 1830–32, exports were generally at about 1.0 million lb or less until 1838, when they exceeded 1.5 million lb for the first time since 1810. Between 1838 and 1849, the last year of the half-century in review, they ranged from 1.0 to 1.7 million lb.

One interpretation of the export record to 1849 as shown in Fig. 4.3 is that the relatively low catch years from about 1812 to 1830 were years of low abundance resulting, at least in part, from overfishing of areas being exploited during the period 1773–95. However, due to wartime gaps in the record, much uncertainty remains.

1850–1909

When the second half of the nineteenth century began, insular Newfoundland had a resident population of about 100 000 people, five times what it had been when the century opened. With the exception of a few rivers in the northern part of the French Shore, all suitable salmon fishing areas were being utilized, mostly by settlers, but Nova Scotians still fished parts of the west and south coasts. The prime source of official returns was the annual Customs and Export Returns of the colonial government, supplemented by reports of the still active Naval Fisheries Patrol. Gaps in the record include salmon taken by the French on the French Shore, believed relatively minor, and by Nova Scotian fishermen and traders on the west and southwest coasts.

The first decade of the second half-century produced only fair to mediocre salmon exports, usually from 1.0 to 1.5 million lb annually, and a Select Committee of the House was appointed to look into the matter in 1856. Its recommendations appear to have had little impact on curbing abuses in the rivers where salmon were most vulnerable.

Given the probable level of fishing pressure by that time, exports remained low until 1868 when they reached 1.8 million lb. In 1869 they were 2.5 million lb and remained at or near 2.0 million lb for most of the 1870's. However, an outcry against abuses in the river fishery, together with the relatively low catch years of 1870 to 1872, prompted new Select Committee hearings on salmon beginning in 1875. By that time, however, exports had begun to recover and regularly exceeded 2.0 million lb from 1873 to 1879 (1876 excluded). This, the longest period of such sustained yield to that time, may have been largely due to increased abundance and seems to have been paralleled in the Maritime Provinces of Canada during these same years.[30, 31]

These high levels were not to last and the disastrously low years from 1880 to 1882 prompted yet another inquiry in 1883, by which date catches had again picked up moderately. A report dated January 4, 1884, entitled *Report of Mr. R. P. Rice, on a Fishery Inquiry, 1883*, outlined many of the problems of the salmon fishery at the time and suggested solutions.[32] This report, and another by the same author in 1885 entitled *On the limits of the estuaries of Salmon Rivers, for netting purposes for the year 1884*, were at least partly responsible for the establishment by the Legislature, in 1887, of a committee called the *Fisheries committee to investigate the operations of the fisheries departments in other countries*.

The aforementioned committee made its first report to the Legislature in 1888. As a result, the Newfoundland Fish-

eries Commission was established as part of the Public Service of the Colony in 1889.[33] Amongst other things, the Commission set about trying to remedy abuses in the salmon fishery and, in 1890, appointed salmon wardens to each of several areas.

With the exception of its opening and closing years, which were moderately good, the 1890's were even lower in salmon exports than the 1880's had been. Moreover, with the exception of a few rivers on the French Shore, the salmon fishery was by then entirely in the hands of residents and all known salmon producing areas were being fully exploited.

The twentieth century opened auspiciously, salmon exports for 1900, at almost 2.5 million lb, being the highest recorded to that date. They were almost as good in 1901. However, the remainder of the decade was at about the same low level as had prevailed during most of the 1890's. The year 1909, ending both the decade and the period of this study, closed with recorded exports of only about 1.3 million lb.

Post-1909 Comparative Records

To give some perspective to apparent levels of production in the pre-1910 era, and recognizing that even with qualifications they are more reliable as indicators of trends than as absolute figures, the record has been carried forward to 1948, and further extended to the mid-1970's using the published record.

Previously recorded salmon statistics begin in 1910 and, during their first decade, are entirely comparable with immediately preceding decades compiled for this report. However, a rapidly rising catch trend beginning in the early 1920's culminated in catches in excess of 5 and 6 million lb in 1929 and 1930, respectively, and remained around 4 million lb or more for almost two decades. Beginning in the early 1950's catches dropped to 1.0–2.0 million lb annually, levels that would have been considered "normal" prior to the big catch years of the 1930's and 1940's, and continued that way until the late 1960's when they began to rise somewhat again. By that time salmon stocks had been fully exploited for many decades, and these variations were probably mainly a reflection of changes in natural abundance. They were paralleled by similar ones in the Maritime Provinces, as was also the case in earlier years. Similar major fluctuations may have occurred in European salmon stocks at about these same times.[34]

The Labrador Record

As indicated earlier, the British salmon fishery in Labrador began in the mid-1760's, that originating in North America (from Newfoundland, Nova Scotia, and New England) just a few years later.

Excluding the period 1774–1809 when Labrador was administered by Quebec, little governmental authority was exercised on that coast until the early 1860's, except for the occasional visit by the Naval Fisheries Protection Patrol, and few official records were kept. Surrogate courts had been established in 1811 and a Court of Civil Jurisdiction in 1826, but the latter was terminated in 1834.[35] It was re-established in 1862 and in 1863 a Revenue Officer was also sent to the coast, mainly to collect import duties from foreign firms. The Court continued until 1874, its annual reports often including useful information on the salmon fishery.[36]

Given the lack of effective governmental representation, it is probable that such Labrador records as do exist seldom include all of any year's catch. For example, the product of the British fishery before about 1860, and not always afterwards, did not usually appear in the local record. This was also true of that by Newfoundland "Houses" and, of course, of salmon caught or bought by migrant vessels of whatever nationality. Even as late as 1880, it was estimated that nine percent of the salmon taken left via the Newfoundland schooner fleet and did not show up in the Labrador record.[37] Though the situation began to improve somewhat in the 1860's, data quantity and quality remain less than desirable to the end of the century and beyond. Table 4.4 is a summary of known Labrador salmon exports during the period 1767–1909.

Pre-1860 Data

As Table 4.4 shows, numerical documentation of the Labrador salmon fishery is sparse to the end of the eighteenth century. Even with Governor Palliser's emphasis on developing the fishery north of the Strait of Belle Isle beginning in the mid-1760's, it was some years before it became consequential, one reason being Labrador's transfer to Quebec jurisdiction from 1774 to 1809.

The first big year for Labrador salmon exports was 1774, when about 300 000 lb were reported from the area south of Sandwich Bay. This high report may have been related to the transfer of jurisdiction in that year. Catches in 1775 and 1776 were even higher, but included the Sandwich Bay fishery which began in 1775.

The record is then intermittent until the early 1800's, resuming from 1804 to 1806 and again from 1810 to 1813. The last 2 years were the highest recorded to that time due, at least in part, to good markets during the War of 1812. The transfer back to Newfoundland jurisdiction (from Quebec) in 1809 may have also encouraged better record keeping for a few years.

After 1813 the record is sparse until 1860, when it resumes again. Why this prolonged hiatus occurred is not known. It may have had to do with administrative economy. Notwithstanding the lack of official figures, the Labrador salmon fishery probably reached full exploitation during that time. There may even have been overexploitation, as indicated by a report that some of the smaller rivers in Hamilton Inlet had become barren of salmon by 1853.[38]

1860–1909 Data

The record is almost continuous from 1860 to 1909, coinciding with reestablishment of the Labrador Court in 1862 and renewed efforts to collect import duties from foreign

TABLE 4.4. Summary of salmon exports from Labrador, 1767–1909 (R.W. × '000), not adjusted for domestic consumption.*

Year	lb	Year	lb	Year	lb	Year	lb
1767	16	1810	535	1865	597	1888	225
		1811	457	1866	305	1889	209
1772	50	1812	745	1867	**		
1773	95	1813	766	1869	**	1890	334
1774	311					1891	268
		1820	150	1870	**	1893	245
1775	509			1871	**	1894	203
1776	372	1826	405	1872	**		
1779	274	1827	**	1873	629	1895	330
		1828	**	1874	614	1896	230
1783	**	1829	432			1897	212
1784	243			1875	987	1898	243
		1830	**	1876	519		
1785	251	1831	479	1877	469	1900	619
				1878	240	1903	250
1790	**	1852	**	1879	213	1904	409
1791	**						
1792	**	1860	389	1880	95	1905	612
		1861	382	1881	253	1906	302
1804	216	1862	435	1882	140	1907	258
1805	199	1863	833	1883	358	1908	165
1806	151	1864	185	1884	672	1909	219

*Condensed from Table A.5, conversions as given in text.
**Annual totals not available, but other supplementary information as discussed.

TABLE 4.5. Labrador salmon exports classified as to origin with Newfoundland (N) or Foreign (F) firms from 1860 to 1882, inclusive. Annual totals may exceed N + F due to inclusion of salmon from other sources (R.W. × '000 lb).

Year	"N"	"F"	Total	Comment	Year	"N"	"F"	Total	Comment
1860	20	369	389		1875	580	342	987	Incl. 65 000 lb canned
1861	11	371	382		1876	519	—	519	
1862	22	413	435		1877	469	—	469	
1863	66	716	833		1878	240	—	240	
1864	—	185	185		1879	213	—	213	
1865	—	—	597*		1880	95	—	95	
1866	—	—	315*		1881	253	—	253	
1873	202	28	629	See Table A.5.	1882	140	—	140	
1874	374	180	624	Census: "F" = *ca.* 360					

*Not from export data, included for continuity.

firms. However, figures are still of questionable accuracy, and not all were official, as noted by Receiver-General Rogerson of the 1881 figures which, "were not cleared from any Customs House . . . [and] do not appear in any Customs Return of Exports."[39]

Salmon exports were usually given only as annual totals, but from 1860 to 1882 were also identified as having originated with either Newfoundland ("N") or foreign ("F") firms (Table 4.5). Between them they included practically all exports in most years. However, there is so much variability in these data, especially in their N:F proportions (e.g. from 1860 to 1863 N:F = 1:20; in 1874 N:F = 2:1), as well as in the reported totals themselves, as to make it impossible to draw any firm conclusions from them.

No official exports are recorded from 1865 to 1872, inclusive, but figures for 1865 and 1866 are available from other sources (Table A.5). Qualitative information also suggests that Labrador catches were good in 1867, 1869, and 1872, as they were on the Island of Newfoundland during these years. After 1883 and 1884, years which appear to have

been fair to good for Labrador salmon, reported exports were down until 1900, which latter year census data indicates to have been quite good. Except for 1904 and 1905, the remaining years of the first decade of the twentieth century also had relatively low production.

In brief summary, the Labrador fishery began, for practical purposes, in the 1760's. However, numerical data are even scarcer and less reliable than for the Island of Newfoundland during the same period. As with insular Newfoundland, there are indications of above normal salmon abundance in the mid-1770's, and again around 1810–12. Such limited data as are available for the period 1813–59 suggest, as for insular Newfoundland, years of generally low abundance. After 1859 records become somewhat more continuous and may be cautiously interpreted. In general, major changes in abundance levels in Labrador are in consonance with those of insular Newfoundland.

Footnotes

1 Ryan 1969.
2 Nicholson 1954: 30.
3 Oxford English Dictionary (O.E.D.) 1961.
4 Encyl. Brit. 1979.
5 Townsend 1911: 272.
6 Chappell 1818: 159.
7 Bonnycastle 1842: 268.
8 Netboy 1968: 370, F.N. #8.
9 J.N.H.A. 1856: 160–161.
10 J.N.H.A. 1860: 497.
11 Durgin 1908: 73.
12 Lindsay and Thompson 1932: 12.
13 Maurice 1938: 14.
14 See, Rep. Nfld. Fish. Bd. for 1937 and 1938: 19, and others.
15 Blair (unpub.).
16 Huntsman 1931: 8.
17 J.N.H.A. 1856: 161.
18 Thompson 1961: 59.
19 *Op. cit.*: : 12.
20 Rep. Nfld. Fish. Bd. for 1940: 18.
21 Blue Book 1880; J.N.H.A. 1881.
22 Hatton and Harvey 1883: 276.
23 Thompson 1931: 32–33.
24 Ann. Rep. Nfld. Fish. Lab. 1935: 131.
25 Blair, *op. cit.*
26 Mannion 1977b: 13.
27 Innis 1940: 241.
28 Mannion, *op. cit.*: 13.
29 J.N.H.A. 1857: 347
30 MacEachern and MacDonald 1962: 43.
31 Kerswill 1960: 5–6.
32 J.N.H.A. 1884: 751–760.
33 Ann. Rep. Nfld. Fish. Comm. for 1889: 3–4
34 See Mills 1971; also Kerswill, *op. cit.*
35 Gosling, *op. cit.*: 390, 396.
36 *Ibid.*: 417–419.
37 Hatton and Harvey 1883: 300.
38 J.N.H.A. 1853: 130.
39 J.N.H.A. 1882: 324.

CHAPTER 5
Summary

1) Pre-Cabotian exploitation of Newfoundland and Labrador salmon runs by indigenous peoples, or by Norsemen, probably had little impact on stock abundance levels.

2) Earliest post-Cabot exploitation of insular Newfoundland salmon runs was by French and British ship fishermen in the sixteenth and seventeenth centuries; and in Labrador by Basque whalers from about 1540–1650, followed by French (1700–63) and then by British interests.

3) Establishment of commercial salmon fisheries in both insular Newfoundland and in Labrador was occasionally delayed by the active hostility of native peoples.

4) Numerical data on the Newfoundland salmon fishery were first required by the "Heads of Inquiry" beginning in 1676, the first known salmon record being for 1723. "Modern" statistics begin in 1910, having been compiled around 1949.

5) In insular Newfoundland, salmon fishing began around 1700 as a commercial venture in the rivers of Bonavista Bay, progressing northward and westward from there to Gander Bay and the Bay of Exploits areas.

6) The first salmon "license" known to have been issued in Newfoundland was to George Skeffington in 1705 for an exclusive fishery in Freshwater Bay, Ragged Harbour, Gander Bay and Dog Creek.

7) Salmon fishing probably began in the Bay of Exploits around 1720 but because of hostile Beothucks remained a seasonal operation for many decades. About the same time, or a little later, it also began in the Halls Bay and White Bay areas.

8) Fishermen from Nova Scotia fished for salmon on the west and south coasts of the Island of Newfoundland from around 1750 until the end of the nineteenth century, sometimes later. Americans did likewise on the west coast during the eighteenth century.

9) The early salmon fishery was initially conducted mainly by weirs and seines in rivers and estuaries, although gill nets were in use in the Bay of Exploits by the 1760's and in Labrador rivers by the 1770's.

10) The English salmon fishery on the west coast began in the Codroy and Bay St. George areas around 1760 and soon reached as far north as Bay of Islands and Bonne Bay. A few rivers north of Bonne Bay continued to be fished by the French until the British–French Convention in 1904.

11) The British Labrador fishery began in the Forteau–Pinware area following the Treaty of Paris in 1763, and gradually moved north from there.

12) There were still only about 500 settlers in Fortune Bay and west of there in 1765 when Captain Cook reported a salmon fishery operating at Long Harbour, Fortune Bay.

13) A small salmon fishery by settlers on the Humber River in the 1760's ceased soon after 1783, probably as a result of the Treaty of Versailles which confirmed that area as part of the French Shore.

14) Captain George Cartwright, an early British adventurer in Labrador, began salmon fishing in the St. Charles River area in 1770. He moved north to the Sandwich Bay area in 1775.

15) Records for the Island of Newfoundland indicate relatively high exports beginning around 1787 (perhaps earlier, but wartime records are missing) and continuing to about 1810, due partly to an expanding and intensifying fishery but perhaps also to high cyclic abundance; followed by several decades of low exports, probably due partly to overfishing in local areas during the earlier period.

16) Reports of early "bonanza" years on the Gander River may have been overstated, but the Gander Bay area does appear to have had high salmon abundance during the period 1790–1810.

17) The Hudson's Bay Company began its Labrador operations at Northwest River and Rigolet in 1836.

18) Commercial salmon fishing expanded from the rivers and harbours of the Burin Peninsula to the outside headlands around 1845. By that time, the "late" or "fall" fishery in the Green Bay and Fogo–Twillingate areas had been in operation for some time.

19) The "Winter's Report", presented to a Select Committee of the House in 1856, described the fishery of the east and northeast coasts in some detail, including the common abuses of the time. A report to a similar inquiry in 1883 appears to have been the forerunner of today's "Caution Notices".

20) Nova Scotian interests operated a large sawmill, perhaps the first in the province, near the mouth of the Humber River in 1865.

21) The 1870's saw the highest salmon exports from insular Newfoundland since records began. A generally similar situation which prevailed in Labrador and in the Maritime Provinces of Canada suggests a period of high cyclic abundance over a wide area.

22) The first salmon wardens for Newfoundland and Labrador were appointed in 1871 on the Island of Newfoundland. The practice lapsed after a few years but was resumed again in the early 1890's.

23) Completion of the trans-insular railway in the 1890's was a major factor in uniting the west coast administratively with the rest of the colony. It also provided an increased market for its salmon.

24) A Newfoundland Fishery Commission which was established in 1889 began to introduce some regulatory control into the salmon fishery. The Commission became Newfoundland's first Department of Fisheries in 1893.

25) A British–French Convention signed in 1904 ended centuries of disagreement between these two nations over the Newfoundland salmon (and other) fisheries, terminating a problem that began with the Treaty of Utrecht in 1713.

26) Much of the early Labrador salmon catch is not included in the official record, having been exported directly from that coast or included in the record of insular Newfoundland.

27) Most numerical data for Labrador can be interpreted only qualitatively. Nonetheless, major trends in that region appear generally to parallel similar occurrences in insular Newfoundland at the same time.

Acknowledgments

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References

ANSPACH, REV. L. A. 1827. A history of the Island of Newfoundland (2nd ed.). Sherwood, Gilbert, and Piper, London. 312 p.

BARKHAM, S. 1978. The Basques: filling a gap in our history between Jacques Cartier and Champlain. Can. Geogr. J. 96(1): 8–19.

BELDING, G. L., AND G. PREFONTAINE. 1938. Studies on the Atlantic salmon.-II. Report on the salmon of the 1937 Port-aux-Basques (Newfoundland) drift-net fishery. Institute of Zoology, Univ. Montreal, Montreal, Que. 58 p.

BLAIR, A. A. [n.d.] Handwritten notes of the late Dr. A. A. Blair relating to Newfoundland salmon exports from about 1836 to 1949. 13 p.

BONNYCASTLE, R. H. 1842. Newfoundland in 1842. 2 vols. Henry Colburn, London.

BOUNDARY DISPUTE DOCUMENTS. A collection of assorted published and unpublished materials of various dates, mostly copies of extracts and affidavits, in the Provincial Archives of Newfoundland at St. John's. (Also referred to as the P. T. McGrath Collection, after its original compiler.)

BROWNE, REV. P. W. 1909. Where the fishers go: The story of Labrador. Cochrane Publishing Co., New York, NY. 366 p.

CARTWRIGHT, F. D. 1826. Life of Major John Cartwright. 2 vols. Henry Cobbins, London.

CHAPPELL, LT. EDWARD. 1818. Voyage of His Majesty's Ship Rosomonde to Newfoundland and the southern coast of Labrador. London. 270 p.

COLONIAL OFFICE PAPERS (C.O.). These are primary manuscript sources covering written communications from the Governors of Newfoundland to the Board of Trade and Secretary of State in London. Extracts are from C.O. Class 194 (C.O. 194) which include the "Heads of Inquiry" of the Fishery for Newfoundland, and span the years from 1694 to 1922.

CUSTOMS RETURNS FOR NEWFOUNDLAND. (Various dates. Usually published as an appendix of the J.N.H.A. after about 1834, sometimes also as separate volumes.)

DURGIN, D. F. 1908. Letters from Labrador. Rumford Publishing Co., Concord, NH. 117 p.

ERSKINE, CAPT. J. E. 1875. Report on the Newfoundland and Labrador Fisheries, 1875. Robert Winton, St. John's, Nfld. 38 p.

GOSLING, W. G. 1910. Labrador: Its discovery, exploration and development. Alston Rivers, Ltd., London. 574 p.

GREAT BRITAIN HOUSE OF COMMONS. 1793. Second report from Committee . . . into the State of the Trade to Newfoundland. London.

GRENFELL, W. T., AND OTHERS. 1913. Labrador: The country and the people. (Revised ed.). The Macmillan Co., New York, NY. 592 p.

HAKLUYT SOCIETY. 1940. The voyages and colonizing enterprises of Sir Humphrey Gilbert (with introductory notes by D. B. Quinn). London. Vol. 2: 239–534.

HATTON, J., AND M. HARVEY. 1883. Newfoundland: its history, its present condition, and its prospects for the future. Doyle and Whittle, Boston, MA. 431 p.

HEAD, C. G. 1976. Eighteenth century Newfoundland. McClelland and Stewart Ltd., Toronto, Ont. 296 p.

HOWLEY, J. P. 1915. The Beothucks or Red Indians: the aboriginal inhabitants of Newfoundland. Cambridge Univ. Press, London. 348 p.

HOWORTH, CMDR. W. 1874. Report of the Newfoundland and Labrador fisheries, 1874. First and second cruizes. Robert Winton, St. John's, Nfld. 111 p.

HUNTSMAN, A. G. 1931. The Maritime salmon of Canada. Bull. Biol. Board Can. XXI: 1–99.

INGSTAD, H. 1969. Westward to Vinland. Macmillan Co. of Canada, Toronto, Ont. 250 p.

INNIS, H. A. 1940. The cod fisheries: the history of an international economy. Ryerson Press, Toronto, Ont. 520 p.

JUKES, J. B. 1842. Excursions in and about Newfoundland, during the years 1839 and 1840. 2 vols. John Murray, London.

KENNEDY, CAPT. W. R. 1881. Sporting notes in Newfoundland. Queen's Printer, St. John's, Nfld. 103 p.

KENNEDY, ADM. W. R. 1885. Sport, travel, and adventure in Newfoundland and the West Indies. Wm. Blackwood and Sons, Edinboro. 399 p.

KERSWILL, C. J. 1960. Commercial landings of Atlantic salmon, 1910 through 1959. Atl. Salmon J. 1960(3): 5–6.

LINDSAY, S. T., AND H. THOMPSON. 1932. Biology of the salmon (*Salmo salar* L.) taken in Newfoundland waters in 1931. Rep. Nfld. Fishery Research Commission. I(2): 1–80.

LOUNSBURY, R. G. 1934. The British fishery at Newfoundland 1634–1783. Yale Univ. Press, New Haven, CN. 399 p.

LYSAGHT, M. A. [ED.] 1971. Joseph Banks in Newfoundland and Labrador, 1766. Faber and Faber Ltd., London. 512 p.

MACEACHERN, N. E. J., AND J. R. MACDONALD. 1962. The salmon fishery in Nova Scotia. Can. Fish Cult. 31: 43–57.

MACNUTT, W. S. 1965. The Atlantic Provinces: the emergence of colonial society. McClelland and Stewart, Toronto, Ont. 305 p.

MACPHERSON, A. G. 1977. A modal sequence in the peopling of central Bonavista Bay. p. 102–135. *In* J. J. Mannion [ed.] The peopling of Newfoundland: essays in historical geography. Social and Economic Papers No. 8, Institute of Social and Economic Research, Memorial Univ. Nfld., St. John's, Nfld.

MANNION, J. J. 1977a. Settlers and traders in western Newfoundland. p. 234–275. *In* J.J. Mannion [ed.] The peopling of Newfoundland: essays in historical geography. Social and Economic Papers No. 8, Institute of Social and Economic Research, Memorial Univ. Nfld., St. John's, Nfld.

1977b. The peopling of Newfoundland: essays in historical geography. Social and Economic Papers No. 8, Institute of Social and Economic Research, Memorial Univ. Nfld., St. John's, Nfld. 289 p.

MAURICE, J. 1938. United States of America fishery market survey. Economic Bull. No. 5, Fisheries Board, Dep. Natural Resources, St. John's, Nfld. 177 p.

MILLS, D. M. 1971. Salmon and trout: A resource, its ecology, conservation and management. St. Martins Press, New York, NY. 351 p.

MURRAY, A. 1874. Letter from A. Murray, Esp., F.G.S., Director of the Geological Survey, to His Excellency, Sir Stephen Hill, K.C.M.G., C.B., dated 26 November 1874.

1875. Letter from A. Murray, Esp., F.G.S., Director of the Geological Survey, to His Excellency, Sir Stephen Hill, K.C.M.G., C.B., dated 4 January 1875.

MURRAY, A., AND J. P. HOWLEY. 1881. Geological Survey of Newfoundland. Edward Stanford, London. 536 p.

NETBOY, A. 1968. The Atlantic salmon: A vanishing species. Faber and Faber, Ltd., London. 457 p.

NEWFOUNDLAND ALMANAC, THE. (Annual Series) Issues for the following years were consulted: 1880, 1881, 1882, 1884, 1885. The Almanac continues as A YEAR BOOK AND ALMANAC OF NEWFOUNDLAND, of which the following annual issues were consulted: 1888–90, 1893–98, 1900–32.

NEWFOUNDLAND BLUE BOOK. (Annual Series) Issues for the following years were consulted: 1826, 1836–1900.

NEWFOUNDLAND CENSUS RETURNS. Census data were consulted for the following census years: 1836, 1857, 1869, 1874, 1884, 1890, 1901, 1911, 1921, and are also available for 1699, 1714, 1715, 1716, 1749, 1750, 1764, 1765, 1770, 1774, 1784, 1785, 1790, 1800 (*ca.*) and 1820 (*ca.*).

NEWFOUNDLAND BOARD OF TRADE. Annual reports for 1909, 1914, 1917–19, 1936–37, and 1939 were consulted.

NEWFOUNDLAND COUNCIL OF THE BOARD OF TRADE. Annual reports for 1918–20, 1937, and 1939 were consulted.

NEWFOUNDLAND DEPARTMENT OF FISHERIES. Annual reports for 1893, 1895, 1896, 1897, 1898, 1902, and 1904 were consulted.

NEWFOUNDLAND DEPARTMENT OF MARINE AND FISHERIES. Annual reports for 1906, 1907, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1917, 1926, 1927, and 1928 were consulted.

NEWFOUNDLAND FISHERIES COMMISSION. 1888. Report of the Fisheries' Commission appointed . . . to investigate the operations of the Fisheries Department in other countries. Queen's Printer, St. John's, Nfld. 38 p. + app.

NEWFOUNDLAND FISHERIES BOARD. 1940. Report . . . for the years 1937 and 1938, with statistical survey for the period 1930–1938. Dep. Natural Resources, St. John's, Nfld. 81 p.

NEWFOUNDLAND HOUSE OF ASSEMBLY, JOURNAL OF (J.N.H.A.). Annual Proceedings of the Newfoundland House of Assembly 1833–1933. (Appendices, in most years, carry reports of government departments and agencies for the years in question.)

NEWFOUNDLAND. 1955. Report of Royal Commission on Forestry. Queen's Printer, St. John's, Nfld.

1974. Report of Royal Commission on Labrador. Volume III, Economic Factors: marine resources. St. Johns, Nfld.

NICHOLSON, N. L. 1954. The boundaries of Canada, its Provinces and Territories. Memoir 2, Canada Dep. Mines and Technical Surveys. Queen's Printer, Ottawa, Ont. 142 p.

OXFORD ENGLISH DICTIONARY, THE. 1961. Clarendon Press, Oxford.

PACKARD, A. S. 1891. The Labrador coast. N.D.C. Hodges, New York, NY. 513 p.

PEET, R. 1971. A report on the counting trap and reconnaissance surveys conducted in central coastal Labrador during 1967. Progress Rept. No. 68, Resource Development Branch, Canada Dep. Fisheries and Forestry, St. John's, Nfld. 286 p. (Typed)

PILOT, REV. D. D. 1895. The Church of England in Newfoundland, p. 1–25. *In* Prowse, 1895. A history of Newfoundland from the English, colonial and foreign records. Macmillan and Co., New York, NY. 22 p.

PORTER, T. R., L. G. RICHE, AND G. R. TRAVERSE. 1974. Catalogue of rivers in insular Newfoundland. 4 vols. Data Record Series No. NEW/D-74-9, Resource Development Branch, Nfld. Region, Environment Canada, Fisheries and Marine Service, St. John's, Nfld.

POYNTER, F. N. L. [ED.] 1963. The Journal of James Yonge (1647–1721), Plymouth Surgeon. Longmans, Green and Co. Ltd., London. 247 p.

PRATT, J. D., G. M. HARE, AND H. P. MURPHY. 1974. Investigations of production and harvest of an Atlantic salmon population, Sandhill River, Labrador. Technical Rept. Series No. NEW/T-74-1, Resource Development Branch, Environment Canada, Fisheries and Marine Service, St. John's, Nfld. 27 p.

PRIVY COUNCIL OF GREAT BRITAIN. (n.d.) In the matter of the boundary dispute between the Dominion of Canada and the Colony of Newfoundland in the Labrador Peninsula. 12 vols. Wm. Clowes and Son, Ltd., London.

PROWSE, D. W. 1895. A history of Newfoundland from the English, colonial, and foreign records. Macmillan and Co., London. 742 p.

PROWSE, D. W. [ED.] 1911. The Newfoundland Guide Book, second edition, 1911. Including Labrador and St. Pierre. Whitehead, Morris and Co., Ltd., London. 184 p.

REEVES, J. 1793. A history of the government of the Island of Newfoundland. Sewell, Debrett, and Downes, London. 167 p.

RICE, R. P. 1884. Report of Mr. R. P. Rice on a fishery inquiry, 1883. Journal Nfld. House of Assembly 1884, app.: 751–760.

ROGERS, J. D. 1911. A historical geography of the British colonies. Volume V — Part IV: Newfoundland. Clarendon Press, Oxford. 274 p.

RYAN, S. 1969. Abstract of C.O. 194 statistics. Dep. History, Memorial University of Newfoundland, St. John's, Nfld.

THOMPSON, F. F. 1961. The French Shore problem in Newfoundland. University of Toronto Press, Toronto, Ont. 222 p.

THOMPSON, H. 1931. A survey of the fisheries of Newfoundland and recommendations for a scheme of research. Rep. Nfld. Fishery Research Commission. I(1): 1–63.

THORNTON, P. A. 1977. The demographic and mercantile bases of initial permanent settlements in the Strait of Belle Isle, p. 152–183. *In* J. J. Mannion [ed.] The peopling of Newfoundland. Social and Economic Papers No. 8, Institute of Social and Economic Research, Memorial University of Newfoundland, St. John's, Nfld.

TOCQUE, REV. P. 1878. Newfoundland: as it was, and as it is in 1877. J. B. Magurn, Toronto, Ont. 511 p.

TOWNSEND, C. W. [ED.] 1911. Captain Cartwright and his Labrador Journal. Dana Estes and Co., Boston. 385 p.

WHITBOURNE, SIR R. 1620. A discourse and discovery of Newfoundland. Felix Kyngston, London.

WHITELEY, W. J. 1975. James Cook in Newfoundland, 1762–1767. Pamphlet No. 3, Nfld. Historical Society, St. John's, Nfld. 31 p.

WINTERS, J. M. 1856. Report on the salmon fishery of this Island. Journal Nfld. House of Assembly 1856, app.: 157–163.

WIX, REV. E. 1836. Six months of a Newfoundland Missionary's Journal, from February to August, 1835. Smith, Elder and Co., London. 264 p.

ZIMMERLY, D. W. 1975. Cain's land revisited: Culture change in central Labrador, 1775–1972. Social and Economic Studies No. 16, Institute of Social and Economic Research, Memorial University of Newfoundland, St. John's, Nfld. 346 p.

Appendix

TABLE A.1. Comparison of previously compiled catch data for Newfoundland and Labrador for 1910–48, including domestic consumption, with "this report" data for the same period which do not include domestic consumption, and the difference between them (R.W. × '000 lb).*

Year	Previous data	This report	Difference	Year	Previous data	This report	Difference
1910	2 389	1 408	981	1930	6 871	8 170	(−)1 299
1911	2 717	2 467	250	1931	6 550	4 228	2 322
1912	3 218	2 692	526	1932	5 022	3 576	1 466
1913	3 433	3 090	343	1933	5 009	4 247	762
1914	3 237	2 306	931	1934	4 806	3 182	1 624
1915	2 695	1 415	1 280	1935	4 706	4 064	642
1916	2 269	1 171	1 098	1936	4 309	3 435	874
1917	2 461	1 800	661	1937	5 353	4 480	873
1918	2 765	1 701	1 064	1938	5 796	4 928	868
1919	2 393	1 012	1 381	1939	4 162	3 303	859
1920	2 476	1 850	626	1940	5 013	4 149	864
1921	3 481	2 899	582	1941	3 970	3 097	873
1922	4 011	2 925	1 086	1942	4 197	3 308	889
1923	4 037	2 971	1 066	1943	3 617	2 766	851
1924	3 576	2 028	1 548	1944	3 606	2 736	870
1925	3 616	3 636	(−)20	1945	3 233	2 362	861
1926	4 458	3 858	600	1946	4 092	3 202	890
1927	4 871	3 960	911	1947	3 928	3 044	884
1928	4 425	2 939	1 486	1948	4 256	3 358	898
1929	4 930	5 317	(−)387				

*"This report" data includes insular Newfoundland and Labrador, though in some years (1915–24, 1926–27, and 1931–35) little or no salmon is identified as Labrador; moreover, 1936–48 figures include both, though no Labrador amount is stated.

TABLE A.2. Comparison of previously compiled catch data for Newfoundland and Labrador for 1910–48 with "this report" data, both including domestic consumption, and the difference between them (R.W. × '000 lb).*

Year	Previous data	This report	Difference	Year	Previous data	This report	Difference
1910**	2 389	2 158	231	1930	6 871	8 920	(−)2 049
1911	2 717	3 217	(−)500	1931	6 550	4 978	1 572
1912	3 218	3 442	(−)224	1932	5 022	4 326	696
1913	3 433	3 840	(−)407	1933	5 009	4 997	12
1914	3 237	3 056	181	1934	4 806	3 932	874
1915	2 695	2 165	530	1935	4 706	4 814	(−)108
1916	2 269	1 921	348	1936***	4 309	4 310	(−)01
1917	2 461	2 550	(−)89	1937	5 353	5 355	(−)02
1918	2 765	2 451	314	1938	5 796	5 803	(−)07
1919	2 393	1 762	631	1939	4 162	4 178	(−)16
1920	2 476	2 500	(−)124	1940	5 013	5 024	(−)11
1921	3 481	3 649	(−)168	1941	3 970	3 972	(−)02
1922	4 011	3 675	336	1942	4 197	4 183	14
1923	4 037	3 721	316	1943	3 617	3 641	(−)27
1924	3 576	2 778	798	1944	3 606	3 611	(−)05
1925	3 616	4 386	(−)770	1945	3 233	3 237	(−)14
1926	4 458	4 608	(−)150	1946	4 092	4 077	15
1927	4 871	4 710	161	1947	3 928	3 919	09
1928	4 425	3 689	736	1948	4 256	4 233	23
1929	4 930	6 068	(−)1 138				

* "This report" data includes insular Newfoundland and Labrador, though in some years (1915–24, 1926–27, and 1931–35) little or no salmon is identified as Labrador; moreover, 1936–48 figures include both, though no Labrador amount is stated.
** The years 1910–35 each include 750 000 lb for domestic consumption.
*** The years 1936–48 each include 875 000 lb for domestic consumption.

TABLE A.3. Early Atlantic salmon records, mostly exports, for Newfoundland and Labrador, 1723–1909. (Conversions as in text; N = Insular Newfoundland, L = Labrador.)

Year		Pickled			Canned		Fresh or Frozen		Total	Source and Comment
		No. tce	No. bbl	R.W. lb	No. cases	R.W. lb	lb	R.W. lb	R.W. lb	
1715	N L									
1716	N L									
1717	N L									
1718	N L									
1719	N L									
1720	N L									
1721	N L									
1722	N L									
1723	N	400		144 000						(C.O. 194 *in* Ryan 1969).
	L									
1724	N	550		198 000					198 000	" "
	L									
1725	N L	680		244 800					244 800	" "
1726	N L	900		324 000					324 000	" "
1727	N L	890		320 000					320 000	" "
1728	N									
1729	N L	199		71 640					71 640	" "
1730	N L	621		223 560					223 560	" "
1731	N L	450		162 000					162 000	" "
1732	N L	314		113 040					113 040	" "

TABLE A.3. (*Continued*)

Year		Pickled			Canned		Fresh or Frozen		Total	Source and Comment
		No. tce	No. bbl	R.W. lb	No. cases	R.W. lb	lb	R.W. lb	R.W. lb	
1733	NL	550		198 000					198 000	" "
1734	NL	546		196 560					196 560	" "
1735	NL	490		176 400					176 400	" "
1736	NL	1 230		442 800					442 800	" "
1737	NL									
1738	NL	710		255 600					255 600	" "
1739	NL	1 188		427 680					427 680	" "
1740	NL	822		295 920					295 920	" "
1741	NL	688		247 680					247 680	" "
1742	NL	526		189 360					189 360	" "
1743	NL	1 690		608 400					608 400	" "
1744	NL									
1745	NL	1 488		535 680					535 680	" "
1746	NL	1 613		580 680					580 680	" "
1747	NL									
1748	NL	2 450		882 000					882 000	" "
1749	NL	1 802		648 720					648 720	" "
1750	NL	1 225		441 000					441 000	" "
1751	NL	867		312 120					312 120	" "

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1752	N	1 741		626 760					626 760	" "
	L									
1753	N	847		304 920					304 920	" "
	L									
1754	N	1 320		475 200					475 200	" "
	L									
1755	N	950		342 000					342 000	" "
	L									
1756	N									Begin Seven Years War.
	L									
1757	N	4 848		1 745 280					1 745 280	C.O. 194 (*in* Ryan 1969).
	L									
1758	N	1 520		547 200					547 200	" "
	L									
1759	N	2 310		831 600					831 600	" "
	L									
1760	N	1 850		666 000					666 000	" "
	L									
1761	N									
	L									
1762	N									
	L									
1763	N	694		249 840					249 840	" "
	L	694								Treaty of Paris
1764	N	2 320		835 200					835 200	C.O. 194 (*in* Ryan 1969).
	L									
1765	N	1 172		421 920					421 920	" "
	L									
1766	N	1 119		402 840					402 840	" "
	L									
1767	N	1 006		362 160					362 160	" "
	L	45		16 200					16 200	Gosling 1910: 476.
1768	N	40 386		(?)					(?)	C.O. 194 (*in* Ryan 1969). Probable error.
	L									
1769	N	919		330 840					330 840	C.O. 194 (*in* Ryan 1969).
	L									

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1770	N	649		233 640					233 640	" "
	L									
1771	N	1 258		452 880					452 880	" "
	L									
1772	N	734		264 240					264 240	" "
	L	140		50 400					50 400	P.C. 841: 2019. Some south of future border.
1773	N	3 543		1 275 480					1 275 480	C.O. 194 (*in* Ryan 1969).
	L	265		95 400					95 400	P.C. 845: 2021.
1774	N	3 501		1 260 360					1 260 360	C.O. 194 (*in* Ryan 1969).
	L	865		311 400					311 400	P.C. 846: 2022. Lab.
1775	N	4 366		1 571 660					1 571 660	C.O. 194 (*in* Ryan 1969).
	L	1 414		509 040					509 040	P.C. 847: 2023. Begin Amer. War of Independence.
1776	N	2 307		830 520					830 520	C.O. 194 (*in* Ryan 1969).
	L	1 032		371 520					371 520	P.C. 850: 2025.
1777	N									
	L									
1778	N	924		332 640					332 640	C.O. 194 (*in* Ryan 1969).
	L									
1779	N									
	L	762		274 320					274 320	P.C. 851: 2026.
1780	N									
	L									
1781	N									
	L									
1782	N									
	L									
1783	N									Treaty of Versailles.
	L									
1784	N	725		261 000					261 000	C.O. 194 (*in* Ryan 1969).
	L	676		243 360					243 360	Gosling 1910: 476.

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1785	N	2 341		842 760					842 760	C.O. 194 (*in* Ryan 1969).
	L	696		250 560					250 560	P.C. 852: 2027.
1786	N	2 596		934 560					934 560	C.O. 194 (*in* Ryan 1969).
	L									
1787	N	3 865		1 391 400					1 391 400	" "
	L									
1788	N	3 736		1 344 960					1 344 960	" "
	L									
1789	N	2 327		837 720					837 720	" "
	L									
1790	N	2 990		1 076 400					1 076 400	" "
	L									
1791	N	3 585		1 290 600					1 290 600	" "
	L									
1792	N	4 598		1 655 280					1 655 280	" "
	L									
1793	N	3 202		1 152 720					1 152 720	C.O. 194 (*in* Ryan 1969).
	L									French Revol. & Nap. Wars begin.
1794	N	5 614		2 021 040					2 021 040	C.O. 194 (*in* Ryan 1969).
	L									
1795	N	3 588		1 291 680					1 291 680	" "
	L									
1796	N									
	L									
1797	N	2 465		887 400					887 400	" "
	L									
1798	N									
	L									
1799	N									
	L									
1800	N	1 797		646 920					646 920	" "
	L									
1801	N	1 688		607 680					607 680	" "
	L									

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1802	N									
	L									
1803	N	3 709		1 335 240					1 335 240	" "
	L									
1804	N	3 739		1 346 040					1 346 040	" "
	L	600		216 000					216 000	Gosling 1910: 476.
1805	N	196		689 760					689 760	C.O. 194 (*in* Ryan 1969).
	L	554		199 440					199 440	Gosling 1910: 476.
1806	N	2 040		734 400					734 400	C.O. 194 (*in* Ryan 1969).
	L	420		151 200					151 200	Gosling 1910: 476.
1807	N	3 469		1 248 840					1 248 840	C.O. 194 (*in* Ryan 1969).
	L									
1808	N	3 272		1 177 920					1 177 920	" "
	L									
1809	N	4 060		1 463 040					1 463 040	" "
	L									Labrador trans. to Nfld., not incl. Magdalens.
1810	N	5 747		2 068 920					2 068 920	C.O. 194 (*in* Ryan 1969).
	L	1 480		534 960					534 960	Gosling 1910: 476.
1811	N	2 694		969 840					969 840	C.O. 194 (*in* Ryan 1969).
	L	1 270		457 200					457 200	Gosling 1910: 476.
1812	N	3 831		1 379 160					1 379 160	C.O. 194 (*in* Ryan 1969). Begin War 1812.
	L	2 069		744 840					744 840	Gosling 1910: 476.
1813	N	3 737		1 345 320					1 345 320	C.O. 194 (*in* Ryan 1969).
	L	2 129		766 440					766 440	Gosling 1910: 476.
1814	N	3 425		1 233 000					1 233 000	C.O. 194 (*in* Ryan 1969). Peace with France.
	L									
1815	N	2 752		990 720					990 720	C.O. 194 (*in* Ryan 1969). Peace with U.S.
	L									
1816	N	2 499		899 640					899 640	C.O. 194 (*in* Ryan 1969).
	L									

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1817	N	2 194		789 840					789 840	" "
	L									
1818	N	1 194		429 840					429 840	" "
	L									
1819	N	2 087		751 320					751 320	" "
	L									
1820	N	1 808		650 880					650 880	" "
	L	417		150 120					150 120	Gosling 1910: 476.
1821	N	1 916		689 760					689 760	C.O. 194 (*in* Ryan 1969).
	L									
1822	N	2 650		954 000					954 000	" "
	L									
1823	N	2 257		812 520					812 520	" "
	L									
1824	N	1 752		630 720					630 720	" "
	L									
1825	N	3 127		1 125 720					1 125 720	" "
	L									Labrador bdy. set at Blanc Sablon.
1826	N	3 204		1 153 440					1 153 440	C.O. 194 (*in* Ryan 1969).
	L	1 124		404 640					404 640	Gosling 1910: 402.
1827	N	2 889		1 040 040					1 040 040	C.O. 194 (*in* Ryan 1969).
	L									
1828	N	2 330.5		838 980					838 980	" "
	L									
1829	N	2 795		1 006 200					1 006 200	" "
	L	1 200		432 000					432 000	Gosling 1910: 479.
1830	N	4 322		1 555 920					1 555 920	C.O. 194 (*in* Ryan 1969).
	L									
1831	N	3 710		1 335 600					1 335 600	" "
	L	1 330		478 800					478 800	Tocque 1878: 300.
1832	N	3 302.5		1 188 900					1 188 900	C.O. 194 (*in* Ryan 1969).
	L									
1833	N	2 901		1 044 360					1 044 360	" "
	L									

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1834	N L	2 625		945 000					945 000	J.N.H.A. 1836.
1835	N L	2 477		891 720					891 720	J.N.H.A. 1836.
1836	N L	2 130		766 800					766 800	J.N.H.A. 1837.
1837	N L	2 262		814 320					814 320	J.N.H.A. 1838.
1838	N L	4 408		1 586 880					1 586 880	B.B. 1838.
1839	N L	2 922		1 051 920					1 051 920	B.B. 1839.
1840	N L	3 396		1 222 560					1 222 560	B.B. 1840.
1841	N L	3 642		1 311 120					1 311 120	B.B. 1841.
1842	N L	4 715		1 697 400					1 697 400	Prowse 1895: 710.
1843	N L	4 058		1 460 880					1 460 880	B.B. 1843.
1844	N L	3 754		1 351 440					1 351 440	B.B. 1844.
1845	N L	3 545		1 276 200					1 276 200	B.B. 1845.
1846	N L		5 201	1 248 240					1 248 240	B.B. 1846.
1847	N L		4 917	1 180 080					1 180 080	B.B. 1847.
1848	N L		3 822	917 280					917 280	B.B. 1848.
1849	N L		5 911	1 418 640					1 418 640	B.B. 1849.
1850	N L	1 933	1 700	1 103 880					1 103 880	B.B. 1850.
1851	N L	2 956	1 613	1 451 280	18	1296[1]			1 452 576	B.B. 1851.
1852	N L	2 899 1 200	765	1 227 240 432 000					1 227 240 432 000	J.N.H.A. 1860. J.N.H.A. 1853 (Esquimaux Bay only).

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1853	N	2 840	1 626	1 412 640					1 516 665	J.N.H.A. 1854. Total incl. 1387 p. (104 025 lb R.W.).[2]
	L									
1854	N	2 601	602	1 080 840					1 093 365	J.N.H.A. 1860. Total incl. 167 p. (12 525 lb R.W.).[2]
	L									
1855	N	2 481	647	1 048 440					1 061 640	J.N.H.A. 1860. Total incl. 176 p. (13 200 lb R.W.).[2]
	L									
1856	N	1 216	1 156	715 200					729 450	J.N.H.A. 1857. Total incl. 190 p. (14 200 lb R.W.).[2]
	L									
1857	N	2 486	815	1 090 560					1 094 010	J.N.H.A. 1860. Total incl. 46 p. (3 450 lb R.W.).[2]
	L									
1858	N	2 726		981 360					989 535	J.N.H.A. 1859. Total incl. 109 p. (8 175 lb R.W.).[2]
	L									
1859	N	3 716		1 337 760					1 339 935	J.N.H.A. 1860. Total incl. 29 p. (2 175 lb R.W.).[2]
	L									
1860	N	3 963		1 426 680					1 436 880	J.N.H.A. 1860–61. Total incl. 51 cwt (5 100 lb R.W.).[3]
	L	1 080		388 800					388 800	Gosling 1910: 478; J.N.H.A. 1866.
1861	N	2 924		1 052 640					1 052 640	J.N.H.A. 1862.
	L	1 061		381 960					381 960	Gosling 1910: 478; J.N.H.A. 1866.
1862	N	4 227		1 521 720					1 523 120	J.N.H.A. 1863. Total incl. 14 cwt (1 400 lb R.W.).[3]
	L	1 208		434 880					434 880	Gosling 1910: 478; J.N.H.A. 1866.
1863	N	3 179	1 767	1 568 520					1 573 120	J.N.H.A. 1864. Total incl. 46 cwt (4 600 lb R.W.).[3]
	L	2 172		781 920	708.3	50 997			832 917	Gosling 1910: 478; J.N.H.A. 1864, 1866.

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1864	N	1 765	1 257	937 080					938 230	J.N.H.A. 1865. Total incl. 11.5 cwt (1 150 lb R.W.).[3]
	L	514		185 040					185 040	Gosling 1910: 478; J.N.H.A. 1866.
1865	N	2 418	1 598	1 254 000					1 264 300	J.N.H.A. 1866. Total incl. 103 cwt (10 300 lb R.W.).[3]
	L	87		31 320					31 320	Gosling 1910: 478.
1866	N	2 917	977	1 284 600	873	62 856			1 347 456[4]	J.N.H.A. 1867.
	L	846		304 560					304 560	Gosling 1910: 478.
1867	N	2 472	1 867	1 338 000	516	37 152			1 375 152	J.N.H.A. 1868.
	L									
1868	N	2 814	2 577	1 631 520	1 730	124 560			1 756 080	J.N.H.A. 1869.
	L									
1869	N	4 712	2 700	2 344 320	91	6 552			2 350 872	J.N.H.A. 1870.
	L									
1870	N	3 258	2 476	1 767 120	73.5	5 292			1 772 412	J.N.H.A. 1871.
	L									
1871	N	1 863	1 151	946 920					954 768	J.N.H.A. 1872.
	L									
1872	N	4 165		1 499 400	214	15 408			1 514 808	J.N.H.A. 1873.
	L									
1873	N	5 557		2 000 520	601.5	43 308			2 043 828	J.N.H.A. 1874.
	L	1 747		628 920					628 920	Gosling 1910: 478. (J.N.H.A. 1874 says L = 1 467 tcs).
1874	N	5 898		2 123 280	99	7 128			2 130 408	J.N.H.A. 1875.
	L	1 539		554 040	966	69 570			623 610	*Ibid.*
1875	N	5 419		1 950 840	586	42 192			1 993 032	J.N.H.A. 1876.
	L	2 561		921 960	909.2	65 460			987 420	*Ibid.*
1876	N	4 345		1 564 200	6	432			1 564 632	J.N.H.A. 1877.
	L	1 443		519 480					519 480	*Ibid.* Nfld. Houses only.
1877	N	5 897		2 122 920	89	6 408			2 129 328	J.N.H.A. 1878.
	L	1 303		469 080					469 080	*Ibid.* Nfld. Houses only.
1878	N	5 342		1 923 120	570	41 040			1 964 160	J.N.H.A. 1879.
	L	666		239 760					239 760	*Ibid.* Nfld. Houses only.
1879	N	6 115		2 201 400	137	9 864	30 000[5]	30 000	2 241 264	J.N.H.A. 1880. (first frozen export?).
	L	592		213 120					213 120	*Ibid.* Nfld. Houses only.

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
	N	2 581		929 160	68	4 896	210 482	210 482	1 149 978	J.N.H.A. 1881. Total incl. 272 k (5 440 lb R.W.).[6]
1880	L	264		95 040					95 040	*Ibid.* Nfld. Houses only.
1881	N	2 600		936 000	114	8 208			944 208	J.N.H.A. 1882.
	L	507		182 520	209	15 048	55 000	55 000	252 568	*Ibid.* Nfld. Houses only.
1882	N	2 859		1 029 240					1 029 240	J.N.H.A. 1883.
	L	389		140 040					140 040	*Ibid.* Nfld. Houses only.
1883	N	4 046		1 456 560					1 456 560	J.N.H.A. 1884.
	L	899		323 640	479	34 488			358 128	*Ibid.* Direct exports.
1884	N	5 344		1 923 840					1 923 840	J.N.H.A. 1885.
	L									
1885	N	4 546		1 636 350			4 800[7]	4 800	1 641 360	J.N.H.A. 1886.
	L									
1886	N	3 320		1 195 200	150	10 800			1 206 000	J.N.H.A. 1887.
	L									
	N	4 401		1 584 360	2.5	180			1 588 440	J.N.H.A. 1888. Total incl. 3 000 sm. (3 900 lb R.W.).[8]
1887	L									
1888	N	4 037		1 453 320	275	19 800			1 473 120	J.N.H.A. 1889.
	L	624		224 640					224 640	*Ibid.* Direct exports.
	N	3 508		1 262 880	314	22 608			1 286 008	J.N.H.A. 1890. Total incl. 400 sm. (520 lb R.W.).[8]
1889	L	581		209 160					209 160	*Ibid.* Direct exports.
1890	N	4 639		1 670 040	756	54 432	2 500	2 500	1 726 972	J.N.H.A. 1891.
	L	822		295 920			38 080	38 080	334 000	*Ibid.* Direct exports.
1891	N	4 678		1 684 080	463	33 336			1 717 416	J.N.H.A. 1892.
	L	745		268 200					268 200	*Ibid.* Direct exports.
	N	1 951		702 360	180	12 960			715 320	J.N.H.A. 1893. Partial record.
1892	L									
1893	N	2 819		1 014 840	63	4 536			1 019 376	J.N.H.A. 1894.
	L	680		244 800					244 800	*Ibid.* Direct exports.
1894	N	2 651		954 360	72	5 184			959 544	J.N.H.A. 1894–95.
	L	565		203 400					203 400	*Ibid.* Direct exports.

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1895	N	3 081		1 109 160	1 870	134 640	8 400[9]	8 400	2 525 200	J.N.H.A. 1896.
	L	917		330 120					330 120	*Ibid.* Direct exports.
1896	N	4 009		1 443 240	172	12 384			1 455 624	J.N.H.A. 1898.
	L	639		230 040					230 040	*Ibid.* Direct exports.[10]
1897	N	2 601		936 360	57	4 104			940 464	B.B. 1898; J.N.H.A. 1911.
	L	589		212 040					212 040	B.B. 1898.
1898	N	3 690		1 328 400			22 003	22 003	1 350 403	B.B. 1899; J.N.H.A. 1911; DOF 1898.
	L	575	150	243 000					243 000	DOF 1898.
1899	N	4 837		1 741 320	124	8 928	118 500	118 500	1 868 748	B.B. 1900. Probably incl. "L".
	L	(?)[11]							(?)	*Ibid.* Large catch in "L".[12]
1900	N	6 647		2 392 920	54	3 888	91 103	91 103	2 487 911	B.B. 1901. Probably incl. "L".
	L	(?)							(?)	Probably incl. in "N".
1901	N	5 838		2 101 680			134 766	134 766	2 236 446	J.N.H.A. 1911. Probably incl. "L".
	L	(?)							(?)	Probably incl. in "N".
1902	N	2 885		1 038 600			167 208	167 208	1 205 808	J.N.H.A. 1911. Probably incl. "L".
	L	(?)							(?)	Probably incl. in "N".
1903	N	2 515		905 400	228	16 416	129 475	129 475	1 051 291	J.N.H.A. 1905.
	L	603	138	250 200					250 200	J.N.H.A. 1904.
1904	N	2 469		888 840	246	17 712	192 054	192 054	1 098 606	J.N.H.A. 1906.
	L	1 135		408 600					408 600	J.N.H.A. 1905.
1905	N	3 225		1 161 000	131	9 432	251 156	251 156	1 421 588	J.N.H.A. 1906; J.N.H.A. 1907.
	L	1 699		611 640					611 640	J.N.H.A. 1906.
1906	N	3 876		1 395 360	201	14 472	164 302	164 302	1 574 134	J.N.H.A. 1908.
	L	840		302 400					302 400	*Ibid.* 1907.
1907	N	2 384		858 240	216	15 552	154 670	154 670	1 028 462	*Ibid.* 1909.
	L	715	1.0	257 640	1				257 640	*Ibid.* 1908.
1908	N	1 774		638 640	392	28 224	139 085	139 085	805 949	*Ibid.* 1910.
	L	357	152.5	165 120					165 120	*Ibid.* 1909.
1909	N	3 074		1 106 640	62	4 464	161 931	161 931	1 273 035	*Ibid.* 1911.
	L	491	177.5	219 360					219 360	*Ibid.* 1910.

TABLE A.3. (*Continued*)

Year		Pickled No. tce	Pickled No. bbl	Pickled R.W. lb	Canned No. cases	Canned R.W. lb	Fresh or Frozen lb	Fresh or Frozen R.W. lb	Total R.W. lb	Source and Comment
1910	N	2 897			256[13]	18 432	208 505	208 505	1 269 857	*Ibid.* 1912.
	L	178	310	138 480					138 480	*Ibid.* 1911.[14]

[1] R.W. per case = 48 × 1.5 = 72 lb.
[2] p = package (also box), usually 75 lb D.W.
[3] cwt = hundredweight. Rare use in small amounts, assume R.W. = D.W.
[4] Warden reports (J.N.H.A. 1874: 847) "N" + "L" = 5 466 bbl in 1865, and = 6 478 bbl in 1866, approx. same as foregoing.
[5] Recorded as 13 tons (J.N.H.A. 1879.)
[6] k = kit = 20 lb. Occasional small amounts only, assume D.W. = R.W.
[7] Given as 20 bbl frozen. Assume 1 bbl = 240 lb R.W.
[8] Sm = smoked, D.W. × 1.3 = R.W.
[9] Based on export value of $420.00 at 0.05¢/lb.
[10] Probably produced in Labrador by Island firms (J.N.H.A. 1898).
[11] (?) indicates no numerical information.
[12] "The very large catch in Labrador accounts for the large increase . . .." (B.B. 1900: 3).
[13] Amount exported only. First year canneries licensed.
[14] For 1906–10 difficult to allocate catch between "N" and "L", most probable given.

TABLE A.4. Annotated summary of early Atlantic salmon records, mostly exports, for Insular Newfoundland and Labrador, no allowance for domestic consumption. (Basic data and sources, unless otherwise noted, as in Table A.3.)

Year	"N" catch[1]		"L" catch[1]		N + L		Comment[2]
	'000 lb	t	'000 lb	t	'000 lb	t	
1720	—	—	—	—	—	—	
21	—	—	—	—	—	—	
22	—	—	—	—	—	—	
23	144	65.3	—	—	—	—	
24	198	89.8	—	—	—	—	
1725	245	111.1	—	—	—	—	
26	324	147.4	—	—	—	—	
27	320	145.1	—	—	—	—	
28	—	—	—	—	—	—	
29	72	32.7	—	—	—	—	
1730	224	101.6	—	—	—	—	
31	162	73.5	—	—	—	—	
32	113	51.3	—	—	—	—	
33	198	89.8	—	—	—	—	
34	196	88.9	—	—	—	—	
1735	176	79.8	—	—	—	—	
36	443	200.9	—	—	—	—	English fishery from C. St. John to C. St. Mary's.
37	—	—	—	—	—	—	
38	256	116.1	—	—	—	—	
39	428	194.1	—	—	—	—	Spanish War, 1739–48.
1740	296	134.2	—	—	—	—	
41	248	112.5	—	—	—	—	
42	189	85.7	—	—	—	—	
43	608	275.7	—	—	—	—	
44	—	—	—	—	—	—	King George's War, 1744–48.
1745	536	243.1	—	—	—	—	
46	581	263.5	—	—	—	—	
47	—	—	—	—	—	—	
48	882	400	—	—	—	—	Peace of Aix-la-Chappelle.
49	649	294.3	—	—	—	—	
1750	441	200	—	—	—	—	Fishery expanding along S. coast.[3]
51	312	141.5	—	—	—	—	
52	627	284.4	—	—	—	—	
53	305	138.3	—	—	—	—	
54	475	215	—	—	—	—	
1755	342	155.0	—	—	—	—	Begin Seven Year War.
56	—	—	—	—	—	—	
57	1 745	791.4	—	—	—	—	
58	547	248.1	—	—	—	—	
59	832	377.3	—	—	—	—	British capture Quebec.
1760	666	302.0	—	—	—	—	
61	—	—	—	—	—	—	
62	—	—	—	—	—	—	French at St. John's.
63	250	113.4	—	—	—	—	Labrador to Nfld.
64	835	378.7	—	—	—	—	British in Labrador.

TABLE A.4. (*Continued*)

Year	"N" catch[1] '000 lb	"N" catch[1] t	"L" catch[1] '000 lb	"L" catch[1] t	N + L '000 lb	N + L t	Comment[2]
1765	422	191.4	—	—	—	—	Begin west coast fishery (British).
66	403	132.8	—	—	—	—	
67	362	164.2	16	7.3	378	171.4	First Labrador record.
68	—	—	—	—	—	—	
69	331	150.1	—	—	—	—	
1770	234	106.1	—	—	—	—	
71	453	205.4	—	—	—	—	
72	264	119.8	50	22.7	314	142.4	
73	1 275	578.2	95	43.1	1 370	621.3	
74	1 260	571.4	311	141.0	1 571	712.5	Labrador to Quebec.
1775	1 572	712.9	509	230.8	2 081	943.8	American War (1775–83).
76	831	376.9	372	168.7	1 203	545.6	
77	—	—	—	—	—	—	
78	333	151.0	—	—	—	—	War with France.
79	—	—	274	124.3	—	—	Salmon abundant S.B.[4]
1780	—	—	—	—	—	—	
81	—	—	—	—	—	—	
82	—	—	—	—	—	—	
83	—	—	—	—	—	—	Treaty Versailles.
84	261	118.4	243	110.2	504	228.6	Engl. from French Shore to Labrador.
1785	843	382.3	251	113.8	1 094	495.1	
86	935	424.0	—	—	—	—	
87	1 391	630.8	—	—	—	—	
88	1 345	610.0	—	—	—	—	
89	838	380.1	—	—	—	—	Begin French Revolution.
1790	1 076	488.0	—	—	—	—	Good fishery S.B.
91	1 291	585.5	—	—	—	—	" "
92	1 655	750.6	50	22.7	1 705	773.2	Labrador: see Innis p. 294
93	1 153	522.9	—	—	—	—	
94	2 021	916.6	—	—	—	—	
1795	1 292	585.9	—	—	—	—	
96	—	—	—	—	—	—	
97	887	402.3	—	—	—	—	
98	—	—	—	—	—	—	
99	—	—	—	—	—	—	
1800	647	293.4	—	—	—	—	Fishery West of F.B.[5]
01	608	275.7	—	—	—	—	
02	—	—	—	—	—	—	
03	1 335	605.4	—	—	—	—	
04	1 346	610.4	216	98.0	1 562	708.4	Poor fishery S.B.
1805	690	312.9	199	90.3	889	403.2	
06	734	333.9	151	68.5	885	401.4	
07	1 249	566.4	—	—	—	—	
08	1 178	534.2	—	—	—	—	
09	1 463	663.5	—	—	—	—	Labrador to Nfld.

TABLE A.4. (*Continued*)

Year	"N" catch[1] '000 lb	"N" catch[1] t	"L" catch[1] '000 lb	"L" catch[1] t	N + L '000 lb	N + L t	Comment[2]
1810	2 070	938.8	535	242.6	2 605	1 181.4	
11	970	439.9	457	207.3	1 427	647.2	
12	1 379	626.4	745	337.9	2 124	963.3	Begin War of 1812.
13	1 345	610.0	766	347.4	2 111	957.4	Good fishery & markets.
14	1 233	559.2	—	—	—	—	End war with U.S.
1815	991	449.4	—	—	—	—	Peace with France.
16	900	408.2	—	—	—	—	Economic depression.
17	790	358.3	—	—	—	—	
18	430	195.0	—	—	—	—	
19	751	340.6	—	—	—	—	
1820	651	295.2	150	68.0	801	363.3	
21	689	312.3	—	—	—	—	
22	954	432.7	—	—	—	—	
23	813	368.7	—	—	—	—	
24	631	286.2	—	—	—	—	
1825	1 126	510.7	—	—	—	—	Labrador boundary set.
26	1 153	522.9	405	183.7	1 558	706.6	
27	1 040	471.7	—	—	—	—	Poor catch Hamilton Inlet.
28	839	380.5	—	—	—	—	
29	1 006	456.2	432	195.9	1 438	652.2	360 000 lb Lab. to Nfld.[6]
1830	1 556	705.7	—	—	—	—	
31	1 336	605.9	479	217.2	1 815	823.1	
32	1 189	539.2	—	—	—	—	
33	1 044	473.5	—	—	—	—	
34	945	428.6	—	—	—	—	
1835	892	404.5	—	—	—	—	
36	767	347.9	—	—	—	—	H.B.C. in Hamilton Inlet.
37	814	369.2	—	—	—	—	
38	1 587	719.7	—	—	—	—	
39	1 052	477.1	—	—	—	—	
1840	1 223	554.7	—	—	—	—	
41	1 311	594.6	—	—	—	—	
42	1 697	769.6	—	—	—	—	
43	1 461	662.6	—	—	—	—	
44	1 351	612.7	—	—	—	—	
1845	1 276	578.7	—	—	—	—	
46	1 248	566.0	—	—	—	—	
47	1 080	489.8	—	—	—	—	
48	917	415.9	—	—	—	—	
49	1 419	643.5	—	—	—	—	
1850	1 104	500.7	—	—	—	—	
51	1 453	659.0	—	—	—	—	
52	1 227	556.5	432	195.9	1 659	752.4	Lab. from Hamilton Inlet.
53	1 517	688.0	—	—	—	—	
54	1 093	495.7	—	—	—	—	

TABLE A.4. (*Continued*)

Year	"N" catch[1] '000 lb	"N" catch[1] t	"L" catch[1] '000 lb	"L" catch[1] t	N + L '000 lb	N + L t	Comment[2]
1855	1 062	481.6	—	—	—	—	
56	729	330.6	—	—	—	—	Poor fishery Burin area.
57	1 094	496.2	—	—	—	—	
58	990	449.0	—	—	—	—	Poor fishery St. M.B.[8]
59	1 340	607.7	—	—	—	—	" "
1860	1 437	651.7	389	176.4	1 826	828.1	Begin English Fishery N. of B. of Isl.[9]
61	1 053	477.6	382	173.2	1 435	605.8	Cod trap invented.
62	1 523	690.7	435	197.3	1 958	888.0	
63	1 573	713.4	833	377.8	2 406	1 091.2	S.B. = 1500 tce.
64	938	425.4	185	83.9	1 123	509.3	Labrador fishery down.
1865	1 264	573.2	597	270.8	1 861	844.0	Lab.: See P.C. 410, p. 1288–89.
66	1 347	610.9	305	138.3	1 652	749.2	Gosling: "L" = 846 tce.
67	1 375	623.6	—	—	—	—	S.B. = 290 000 lb.[10]
68	1 756	796.4	—	—	—	—	Good in Hamilton Inlet.
69	2 350	1 065.8	—	—	—	—	Cartwright 204 000 lb.[11]
1870	1 772	803.6	—	—	—	—	S.B. = 164 000 lb.[12]
71	955	433.1	—	—	—	—	First wardens.[13]
72	1 515	687.1	—	—	—	—	S. coast poor.
73	2 044	927.0	629	285.3	2 673	1 212.2	See note #14 below.
74	2 130	966.0	624	283.0	2 754	1 249.0	
1875	1 993	903.9	987	447.6	2 980	1 351.5	Poor in Hamilton Inlet.
76	1 565	709.8	519	235.4	2 084	945.1	"L" = "N" Houses only.
77	2 129	965.5	469	212.7	2 598	1 178.2	" "
78	1 964	890.7	240	108.8	2 204	999.6	" "
79	2 241	1 016.3	213	96.6	2 454	1 112.9	" "
							First frozen exports.
1880	1 150	521.5	95	43.1	1 245	564.6	"L" = "N" Houses only.
81	944	428.1	253	114.7	1 197	542.9	" "
82	1 029	466.7	140	63.5	1 169	530.2	" "
83	1 457	660.8	358	162.4	1 815	823.1	"L" = "N" + "F".[15]
84	1 924	872.6	—	—	—	—	See 1884 Census Return re Labrador.
1885	1 641	744.2	—	—	—	—	
86	1 206	547.2	—	—	—	—	
87	1 588	720.2	—	—	—	—	
88	1 473	668.0	225	102.0	1 698	770.1	"L" = "N" + "F".
89	1 286	583.2	209	94.8	1 495	678.0	"L" = "N" + "F".
1890	1 727	783.2	334	151.5	2 061	934.7	"L" = "N" + "F".
91	1 717	778.7	268	121.5	1 985	900.2	"L" = "N" + "F".
92	715	324.3	—	—	—	—	Partial record.
93	1 019	462.1	245	111.1	1 264	573.2	"L" = "N" + "F".
94	960	435.4	203	92.1	1 163	527.4	
1895	1 252	567.8	330	149.7	1 582	717.5	"L" = "N" + "F".
96	1 456	660.3	230	104.3	1 686	764.6	" "
97	940	426.3	212	96.2	1 152	522.5	" "
98	1 350	612.2	243	110.2	1 593	722.5	Begin. train service.
99	1 869	847.6	—	—	—	—	"N" may incl. "L".[16]

TABLE A.4. *(Continued)*

Year	"N" catch[1] '000 lb	"N" catch[1] t	"L" catch[1] '000 lb	"L" catch[1] t	N + L '000 lb	N + L t	Comment[2]
1900	2 489	1 128.8	—	—	—	—	"N" may incl. "L".[16]
01	2 236	1 014.1	—	—	—	—	"N" incl. "L"?
02	1 206	546.9	—	—	—	—	"N" incl. "L"?
03	1 051	476.6	250	113.4	1 301	590.0	"N" not incl. "L".
04	1 099	498.4	409	185.5	1 508	683.9	"N" not incl. "L", 1904 Convention.
1905	1 422	644.9	612	277.6	2 034	922.5	"N" not incl. "L".
06	1 574	713.8	302	137.0	1 876	850.8	"N" incl. "L"?
07	1 028	466.2	258	117.0	1 286	583.2	"N" incl. "L"?
08	806	365.5	165	74.8	971	440.4	
09	1 273	577.3	219	99.3	1 492	676.6	Poor fishery in "L".

[1] "N" = Insular Newfoundland; "L" = Labrador.
[2] See Table A.3 for additional sources.
[3] To Placentia and Fortune Bays.
[4] Sandwich Bay, Labrador.
[5] Fortune Bay.
[6] Gosling, *op. cit.*: 479.
[7] Earlier known as Esquimaux Bay.
[8] St. Mary's Bay.
[9] Bay of Islands.
[10] J.N.H.A. 1868: 513.
[11] J.N.H.A. 1870: 493.
[12] J.N.H.A. 1871: 647.
[13] J.N.H.A. 1872: 716.
[14] J.N.H.A. 1874: 517 says "L" = 1 467 tce (*ca.* 530 000 lb R.W.).
[15] "F" Foreign Houses (i.e. British) in Labrador.
[16] From 1899 to 1907, as indicated, "L" catch, whether reported separately or not, is sometimes apparently included in the "N" figures.

TABLE A.5. Annotated summary of Atlantic salmon records for Labrador, 1767–1909; no allowance for domestic consumption.

Year	Catch			Source and Comment[1]
	No. tierce	R.W. ('000 lb)	Tonnes	
1767	45+	16+[2]	7.3	Gosling 1910. First Labrador record.
1772	140	50	22.7	P.C. 841: 2019. Incl. part of Quebec.
73	265	95	43.1	P.C. 845: 2021.
74	865	311	141.0	P.C. 846: 2022.
1775	1 414	509	230.1	P.C. 847: 2023. S.B. fishery begins.
76	1 032	372	168.7	P.C. 850: 2025. Good fishery in S.B.
79	762	274	124.3	P.C. 851: 2026. Salmon abundant in S.B.
1783	—	—	—	S.B. fishery poor.[3]
84	676	243	110.2	Gosling, *op. cit.* English move from French Shore to Labrador.
1785	696	251	113.8	P.C. 852: 2027. S.B. = 400 tce.[3]
1790	—	—	—	Good fishery in S.B.[3]
91	—	—	—	" "
92	138	50	22.7	Innis 1940: 294, F.N. 13. Forteau area only.
1804	600	216	98.0	Gosling, *op. cit.*: 476. S.B. poor.
1805	55.4	199	90.3	*Ibid.*
06	420	151	68.5	"
09	—	—	—	Labrador returned to Nfld.
1810	1 486	535	242.6	Gosling, *op. cit.*: 476.
11	1 270	457	207.3	*Ibid.*
12	2 069	745	337.9	*Ibid.* War of 1812 begins.
13	2 129	766	347.4	*Ibid.* Fishery and markets good.
1820	417	150	68.0	*Ibid.*
1826	1 124	405	183.7	*Ibid.* 402. S.B. *ca.* 700 tce.
27	—	—	—	S.B. = 350 tce; Ham. Inl. = 400 tce.[4]
28	—	—	—	S.B. = 600 tce.[4]
29	1 200	432	195.9	Gosling, *op. cit.*: 476. 1000 tce to "N". S.B. = 700 tce.[4]
1830	—	—	—	S.B. = 485 tce; Ham. Inl. = 450 tce.[4].
31	1 330	479	217.2	Tocque 1878: 300
1852	1 200	432	195.9	J.N.H.A. 1853: Ham. Inl. only.
1860	1 080	389	176.4	J.N.H.A. 1866. "F" = 1 025, "N" = 55 tce.[5]
61	1 061	382	173.2	*Ibid.* "F" = 1 031, "N" = 30 tce.
62	1 208	435	197.3	*Ibid.* "F" = 1 148, "N" = 60 tce.
63	2 172	833	377.8	*Ibid.* "F" = 1 988, "N" = 184 tce, 51 000 lb cans.
64	514	185	83.9	*Ibid.* All "F", catch down.

TABLE A.5. (*Continued*)

Year	Catch: No. tierce	Catch: R.W. ('000 lb)	Catch: Tonnes	Source and Comment[1]
1865	1 657	597	270.7	P.C. 410: 1 288–89.
66	846	305	138.3	Gosling, *op. cit.*: 478.
67	—	—	—	J.N.H.A. 1868: S.B. = 600 tce + cans.
69	—	—	—	J.N.H.A. 1870: S.B. = 400 tce + cans.
1870	—	—	—	J.N.H.A. 1871: S.B. = 190 tce + cans.
72	—	—	—	J.N.H.A. 1873: Cartwright catch poor.
73	1 747	629	285.3	Gosling, *op. cit.*: 478; J.N.H.A. 1874: "F" = 77, "N" = 560, "Traders" = 830 tce.
74	1 539	624	282.9	J.N.H.A. 1875. "F" = 500, "N" = 1 039 tce.
1875	2 561	987	447.6	J.N.H.A. 1876. "F" = 950, "N" = 1 611 tce; S.B. = 800 tce + cans.
76	1 443	519	235.4	J.N.H.A. 1877. All "N". S.B. "fabulous".
77	1 303	469	212.7	J.N.H.A. 1878. All "N".
78	666	240	108.8	J.N.H.A. 1879. All "N".
79	592	213	96.6	J.N.H.A. 1880. All "N". Failure at Rigolet.
1880	264	95	43.1	J.N.H.A. 1881. All "N".
81	507	253	114.7	J.N.H.A. 1882. All "N", incl. some frozen & cans.
82	389	140	63.5	J.N.H.A. 1883. All "N".
83	899	358	162.4	J.N.H.A. 1884. All "N". Incl. 35 000 lb cans.
84	1 868	672	304.8	Census Return 1884.
1888	624	225	102.0	J.N.H.A. 1889.
89	581	209	94.8	J.N.H.A. 1890.
1890	822	334	151.5	J.N.H.A. 1891 (incl. 38 000 lb frozen).
91	745	268	121.5	J.N.H.A. 1892.
93	680	245	111.1	J.N.H.A. 1894.
94	565	203	92.1	J.N.H.A. 1896.
1895	917	330	149.7	J.N.H.A. 1897.
96	639	230	104.3	J.N.H.A. 1898.
97	589	212	96.1	Blue Book 1897.
98	575	243	110.2	Dept. Mar. Fish. 1898.
1900	1 719	619	280.7	Census Return 1901. Ham. Inl. = 295 tce.
03	603	250	113.4	J.N.H.A. 1904.
04	1 135	409	185.5	J.N.H.A. 1905.
1905	1 699	612	277.6	J.N.H.A. 1906.
06	840	302	137.0	J.N.H.A. 1907.
07	715	258	117.0	J.N.H.A. 1908. H.B.C. = 617 tce. "N" = 98 tce.
08	357	165	74.8	J.N.H.A. 1909. Poor fishery.
09	491	219	99.3	J.N.H.A. 1910. Poor fishery, low prices.

[1] Abbreviations: "N" = Insular Newfoundland, "L" = Labrador (also Lab.), S.B. = Sandwich Bay, Ham. Inl. = Hamilton Inlet.
[2] + indicates that real figure higher than indicated.
[3] Deductions re S.B. from Cartwright's diaries.
[4] Bdy. Disp. Doc., Box 10, Folder 1.
[5] "F" = foreign firms, "N" = Newfoundland (Island) firms.